I DO WE DO YOU DO

An RTI Intervention for Math Problem Solving Grades 1-5

by Dr. Sherri Dobbs Santos

Copyright 2011 by Dr. Sherri Dobbs Santos All rights reserved

The classroom teacher may reproduce copies of materials in this book for classroom use only. The reproduction of any part for an entire school or school system is strictly prohibited.

ISBN: 978-1-257-91811-9

Special thanks to Lynda Clary-Burke for creating the rubric used in this manual for the problem solving assessments. Her brilliance, expertise, and insight are second to none.

Also, special thanks to Jenny Salter, my friend and colleague, for proofreading and editing this manual. Her eye for detail is impeccable.

Lastly, thank you to my daughter Christian Santos and her friend Zachary Geiwitz for solving each problem in the manual. Their diligence in double and triple checking the answers is greatly appreciated.

A spiral bound version of this book can be purchased at lulu.com

TABLE OF CONTENTS

| What is RTI? | 5 |
|---|-----|
| Intervention Based on Research | 6 |
| Intervention Overview | 12 |
| Explanation of Universal Screening | 12 |
| Explanation of Progress Monitoring | 12 |
| Explanation of Progress Monitoring Graphs and Data Analysis | 12 |
| Sample Progress Monitoring Graphs | 12 |
| Progress Monitoring Data Recording Graphs | 15 |
| Implementation Directions | 17 |
| I DO - WE DO - YOU DO 1 st Grade | 19 |
| PROGRESS MONITORING ASSESSMENT SAMPLE | 20 |
| Universal Screening/Baseline Assessment 1 st Grade | 21 |
| Data Point Assessment #1 with Rubric 1 st Grade | 22 |
| Math Problem Solving Cards 1 st Grade | 35 |
| 'I DO - WE DO - YOU DO' <u>SAMPLE CARD</u> | 36 |
| MATH PROBLEM SOLVING CARDS TEMPLATE | 73 |
| I DO - WE DO - YOU DO 2 nd Grade | 75 |
| Universal Screening/Baseline Assessment 2 nd Grade | 76 |
| Data Point Assessment #1 with Rubric 2 nd Grade | 77 |
| Math Problem Solving Cards 2 nd Grade | 89 |
| I DO - WE DO - YOU DO 3 rd Grade | |
| Universal Screening/Baseline Assessment 3 rd Grade | 128 |
| Data Point Assessment #1 with Rubric 3 rd Grade | 129 |
| Math Problem Solving Cards 3 rd Grade | |

| I DO - WE DO - YOU DO 4 th Grade | |
|---|-----|
| Universal Screening/Baseline Assessment 4 th Grade | |
| Data Point Assessment #1 with Rubric 4 th Grade | |
| Math Problem Solving Cards 4 th Grade | |
| I DO - WE DO - YOU DO 5 th Grade | 231 |
| Universal Screening/Baseline Assessment 5 th Grade | 232 |
| Data Point Assessment #1 with Rubric 5 th Grade | 233 |
| Math Problem Solving Cards 5 th Grade | |
| I DO - WE DO - YOU DO Intervention Answers | |

WHAT IS RTI?

Response to Intervention (RTI) is a multi-tier approach to the early identification and support of students with learning and behavior needs. The RTI process begins with high-quality instruction and universal screening of all children in the general education classroom. Struggling learners are provided with interventions at increasing levels of intensity to accelerate their rate of learning. These services may be provided by a variety of personnel, including general education teachers, special educators, and specialists. Progress is closely monitored to assess both the learning rate and level of performance of individual students. Educational decisions about the intensity and duration of interventions are based on individual student response to instruction. RTI is designed for use when making decisions in both general education and special education, creating a well-integrated system of instruction and intervention guided by child outcome data. (National Center for Learning Disabilities, 2008)

RTI MODEL

The 'I DO - WE DO - YOU DO' intervention in this manual is one which can be used for RTI purposes but is also a model of what good teaching looks like. This manual includes the research behind the intervention, directions for the implementation of the intervention, and assessments that can be used for Progress Monitoring of the intervention. It is designed to provide the teacher/ interventionist with the tools necessary to improve student achievement in the area of math problem solving. The timeline of the intervention is 12 weeks with progress being monitored weekly. A total of 36 'I DO - WE DO - YOU DO' problem solving cards are included to guide both teachers and students through the problem solving process and provide a format through which ideas are modeled, discussed, explained, and solved. This format fosters a deeper understanding of the underlying thought processes involved with problem solving and encourages non-threatening, openended dialogue to occur between teachers and their students. The decision to adjust, revise, lengthen, or discontinue the intervention should be based on the data collected on a weekly basis and should be made in the context of a committee that includes the teacher, the student's parents, administrators, counselors, and/or other highly gualified educational personnel. The student's RTI should be assessed by looking at how much progress was made overall and where the student is functioning in relation to the standards set forth by the state and/or district. Students who make significant progress but who are still functioning below grade level may simply need more time to catch up. Just because a student is below grade level does not mean he/she has a disability and is a candidate for special education. The RTI process is an individualized process and rash decisions concerning a student's placement should be avoided at all costs.

EVIDENCE BASED

The 'I DO - WE DO - YOU DO' Math Problem Solving Intervention was developed using the *two strongest* of eight recommendations cited in the following report:

Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. (2009). Assisting students struggling with mathematics: Response to Intervention (RtI) for elementary and middle schools (NCEE 2009-4060). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/publications/practiceguides/.

Table I shows a summary of the report that was written by a panel of highly qualified individuals: "The recommendations were developed by a panel of researchers and practitioners with expertise in various dimensions of this topic. The panel includes a research mathematician active in issues related to K-8 mathematics education, two professors of mathematics education, several special educators, and a mathematics coach currently providing professional development in mathematics in schools. The panel members worked collaboratively to develop recommendations based on the best available research evidence and our expertise in mathematics, special education, research, and practice."

http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti_math_pg_042109.pdf

The panel used the criteria established by the *What Works Clearinghouse* to support each recommendation and to determine the level of evidence found to back them up. The level of strength of evidence found for each recommendation is explained below: <u>http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti_math_pg_042109.pdf</u>

<u>Strong</u>: refers to consistent and generalizable evidence that an intervention program causes better outcomes.

<u>Moderate</u>: refers either to evidence from studies that allow strong causal conclusions but cannot be generalized with assurance to the population on which a recommendation is focused (perhaps because the findings have not been widely replicated)—or to evidence from studies that are generalizable but have more causal ambiguity than offered by experimental designs (such as statistical models of correlational data or group comparison designs for which the equivalence of the groups at pretest is uncertain).

<u>Low</u>: refers to expert opinion based on reasonable extrapolations from research and theory on other topics and evidence from studies that do not meet the standards for moderate or strong evidence.

Table I: Recommendations and corresponding levels of evidence

| Recommendation | Level of |
|--|----------|
| Tier I | evidence |
| 1. Screen all students to identify those at risk for potential mathematics difficulties and provide interventions to students identified as at risk. | Moderate |
| Tiers II and III | |
| Instructional materials for students receiving interventions should focus intensely on in-depth treatment of whole numbers in kindergarten through grade 5 and on rational numbers in grades 4 through 8. These materials should be selected by committee. | Low |
| 3. Instruction during the intervention should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review. | Strong |
| 4. Interventions should include instruction on solving word problems that is based on common underlying structures. | Strong |
| 5. Intervention materials should include opportunities for students to work with visual representations of mathematical ideas and interventionists should be proficient in the use of visual representations of mathematical ideas. | Moderate |
| 6. Interventions at all grade levels should devote about 10 minutes in each session to building fluent retrieval of basic arithmetic facts. | Moderate |
| 7. Monitor the progress of students receiving supplemental instruction and other students who are at risk. | Low |
| 8. Include motivational strategies in Tier II and Tier III interventions. | Low |

http://ies.ed.gov/ncee/wwc/pdf/practiceguides/rti_math_pg_042109.pdf

THE TWO RECOMMENDATIONS WHICH SHAPED THE DESIGN OF THE 'I DO - WE DO - YOU DO' MATH PROBLEM SOLVING INTERVENTION WERE **RECOMMENDATIONS #3 AND #4** (see table on the previous page).

RECOMMENDATION #3

Instruction during the intervention should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.

The National Mathematics Advisory Panel (NMAP) defines *explicit instruction* as follows (2008, p. 23):

- "Teachers provide clear models for solving a problem type using an array of examples."
- "Students receive extensive practice in use of newly learned strategies and skills."
- "Students are provided with opportunities to think aloud (i.e., talk through the decisions they make and the steps they take)."
- "Students are provided with extensive feedback."

Research Citations for Explicit Instruction:

Artus, L. M., & Dyrek, M. (1989). The effects of multiple strategy intervention on achievement in mathematics. Unpublished master's thesis, Saint Xavier College, Chicago.

Butler, F. M., Miller, S. P., Crehan, K., Babbitt, B., & Pierce, T. (2003). Fraction instruction for students with mathematics disabilities: Comparing two teaching sequences. *Learning Disabilities Research & Practice, 18*(20), 99-111.

Darch, C., Carnine, D., & Gersten, R. (1984). Explicit instruction in mathematics problem solving. *Journal of Educational Research*, 77(6), 351-359.

Fuchs, L. S., Compton, D. L., Fuchs, D., Paulsen, K., Bryant, J. D., & Hamlett, C. L. (2005). The prevention, identification, and cognitive determinants of math difficulty. *Journal of Educational Psychology, 97*(3), 493–513.

Fuchs, L. S., Fuchs, D., Craddock, C., Hollenbeck, K. N., & Hamlett, C. L. (2008). Effects of small-group tutoring with and without validated classroom instruction on at-risk students' math problem solving: Are two tiers of prevention better than one? *Journal of Educational Psychology*, *100*(3), 491-509.

Fuchs, L. S., Fuchs, D., Finelli, R., Courey, S. J., & Hamlett, C. L. (2004). Expanding schema-based transfer instruction to help third graders solve real-life mathematical problems. *American Educational Research Journal, 41*(2), 419-445.

Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlett, C. L., Owen, R., et al. (2003a). Explicitly teaching for transfer: Effects on third-grade students' mathematical problem solving. *Journal of Educational Psychology*, *95*(2), 293-305.

Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlett, C. L., Owen, R., et al. (2003b). Enhancing third-grade students' mathematical problem solving with self-regulated learning strategies. *Journal of Educational Psychology*, *95*(2), 306-315.

Fuchs, L. S., Fuchs, D., Prentice, K., Hamlett, C. L., Finelli, R., & Courey, S. J. (2004). Enhancing mathematical problem solving among third-grade students with schema-based instruction. *Journal of Educational Psychology*, *96*(4), 635-647.

Fuchs, L. S., Powell, S. R., Hamlett, C. L., & Fuchs, D. (2008). Remediating computational deficits at third grade: A randomized field trial. *Journal of Research on Educational Effectiveness, 1*(1), 2-32.

Fuchs, L. S., Seethaler, P. M., Powell, S. R., Fuchs, D., Hamlett, C. L., & Fletcher, J. M. (2008). Effects of preventative tutoring on the mathematical problem solving of third-grade students with math and reading difficulties. *Exceptional Children, 74*(2), 155-173.

Jitendra, A. K., Griffin, C. C., McGoey, K., Gardill, M. C., Bhat, P., & Riley, T. (1998). Effects of mathematical word problem solving by students at risk or with mild disabilities. *The Journal of Educational Research, 91*(6), 345–355.

Schunk, D. H., & Cox, P. D. (1986). Strategy training and attributional feedback with learning disabled students. *Journal of Educational Psychology, 78*(3), 201-209.

Tournaki, N. (2003). The differential effects of teaching addition through strategy instruction versus drill and practice to students with and without learning disabilities. *Journal of Learning Disabilities, 36*(5), 449-458.

Walker, D. W., & Poteet, J. A. (1989). A comparison of two methods of teaching mathematics story problemsolving with learning disabled students. *National Forum of Special Education Journal, 1*, 44–51.

Wilson, C. L., & Sindelar, P. T. (1991). Direct instruction in math word problems: Students with learning disabilities. *Exceptional Children*, *57*(6), 512–519.

Witzel, B. S. (2005). Using CRA to teach algebra to students with math difficulties in inclusive settings. *Learning Disabilities—A Contemporary Journal, 3*(2), 49-60.

Witzel, B. S., Mercer, C. D., & Miller, M. D. (2003). Teaching algebra to students with learning difficulties: An investigation of an explicit instruction model. *Learning Disabilities Research & Practice, 18*(2), 121-131.

Woodward, J. (2006). Developing automaticity in multiplication facts: Integrating strategy instruction with timed practice drills. *Learning Disability Quarterly, 29*(4), 269–289.

Xin, Y. P., Jitendra, A. K., & Deatline-Buchman, A. (2005). Effects of mathematical word-problem-solving instruction on middle school students with learning problems. *Journal of Special Education, 39*(3), 181–192.

***NOTE**: The NMAP notes that this does not mean that all mathematics instruction should be explicit. But it does recommend that struggling students receive some explicit instruction regularly and that some of the explicit instruction ensure that students possess the foundational skills and conceptual knowledge necessary for understanding their grade-level mathematics. National Mathematics Advisory Panel (2008).

The NMAP supports recommendation #3 and believes that districts and schools should select materials for interventions that reflect this orientation. In addition, professional development for interventionists should contain guidance on these components of explicit instruction.

LEVEL OF EVIDENCE: STRONG

The NMAP judged the level of evidence supporting this recommendation to be *strong*. This recommendation is based on six randomized controlled trials that met WWC standards or met standards with reservations and that examined the effectiveness of explicit and systematic instruction in mathematics interventions.

Research Citations that Support Recommendation #3 (the six randomized controlled trials)

Darch, C., Carnine, D., & Gersten, R. (1984). Explicit instruction in mathematics problem solving. *Journal of Educational Research*, 77(6), 351-359.

Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlett, C. L., Owen, R., et al. (2003a). Explicitly teaching for transfer: Effects on third-grade students' mathematical problem solving. *Journal of Educational Psychology*, *95*(2), 293-305.

Jitendra, A. K., Griffin, C. C., McGoey, K., Gardill, M. C., Bhat, P., & Riley, T. (1998). Effects of mathematical word problem solving by students at risk or with mild disabilities. *The Journal of Educational Research, 91*(6), 345–355.

Schunk, D. H., & Cox, P. D. (1986). Strategy training and attributional feedback with learning disabled students. *Journal of Educational Psychology, 78*(3), 201-209.

Tournaki, N. (2003). The differential effects of teaching addition through strategy instruction versus drill and practice to students with and without learning disabilities. *Journal of Learning Disabilities, 36*(5), 449-458.

Wilson, C. L., & Sindelar, P. T. (1991). Direct instruction in math word problems: Students with learning disabilities. *Exceptional Children*, *57*(6), 512-519.

The results of the six randomized controlled trials of mathematics interventions show extensive support for various combinations of the following components of explicit and systematic instruction:

- INSTRUCTION DURING THE INTERVENTION SHOULD INCLUDE TEACHER DEMONSTRATION & STUDENT VERBALIZATION
- INSTRUCTION DURING THE INTERVENTION SHOULD BE EXPLICIT AND SYSTEMATIC GUIDED PRACTICE
- INSTRUCTION DURING THE INTERVENTION SHOULD INCLUDE CORRECTIVE FEEDBACK
- INSTRUCTION DURING THE INTERVENTION SHOULD INCLUDE SCAFFOLDED PRACTICE

These studies have shown that explicit and systematic instruction can significantly improve proficiency in word problem solving and operations across grade levels and diverse student populations.

All six studies examined interventions that included teacher demonstrations early in the lessons. For example, three studies included instruction that began with the teacher verbalizing aloud the steps to solve sample mathematics problems. However, the effects of this component of explicit instruction cannot be evaluated from these studies because the demonstration procedure was used in instruction for students in both treatment and comparison groups.

Scaffolded practice, a transfer of control of problem solving from the teacher to the student, was a component in four of the six studies. Although it is not possible to parse the effects of scaffolded instruction from the other components of instruction, the intervention groups in each study demonstrated significant positive gains on word problem proficiencies or accuracy measures.

Three of the six studies included opportunities for students to verbalize the steps to solve a problem. Again, although effects of the interventions were statistically significant and positive on measures of word problems, operations, or accuracy, the effects cannot be attributed to a single component of these multicomponent interventions.

Similarly, four of the six studies included immediate corrective feedback, and the effects of these interventions were positive and significant on word problems and measures of operations skills, but the effects of the corrective feedback component cannot be isolated from the effects of other components in three cases. With only one study in the pool of six including cumulative review as part of the intervention, Fuchs et al. (2003a), the support for this component of explicit instruction is not as strong as it is for the other components. But this study did have statistically significant positive effects in favor of the instructional group that received explicit instruction in strategies for solving word problems, including cumulative review.

.....

THE SECOND RECOMMENDATION WHICH SHAPED THE DESIGN OF THE 'I DO - WE DO - YOU DO' MATH PROBLEM SOLVING INTERVENTION WAS RECOMMENDATION #4 (see table).

Recommendation #4:

Interventions should include instruction on solving word problems that is based on common underlying structures.

Students who have difficulties in mathematics typically experience severe difficulties in solving word problems related to the mathematics concepts and operations they are learning. This is a major impediment for future success in any math-related discipline. Based on the importance of building proficiency and the convergent findings from a body of high-quality research, the panel recommends that interventions include systematic explicit instruction on solving word problems, using the problems' underlying structure. Simple word problems give meaning to mathematical operations such as subtraction or multiplication. When students are taught the underlying structure of a word problem, they not only have greater success in problem solving but can also gain insight into the deeper mathematical ideas in word problems. The panel also recommends systematic instruction on the structural connections between known, familiar word problems and unfamiliar, new problems. By making explicit the underlying structural connections between familiar and unfamiliar problems, students will know when to apply the solution methods they have learned. (Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. [2009])

LEVEL OF EVIDENCE: STRONG

The panel judged the level of evidence supporting this recommendation to be *strong*. This recommendation is based on nine randomized controlled trials that met WWC standards or met standards with reservations and that examined the effectiveness of word problem-solving strategies.

Research Citations that Support Recommendation #4 (the nine randomized controlled trials):

Darch, C., Carnine, D., & Gersten, R. (1984). Explicit instruction in mathematics problem solving. *Journal of Educational Research*, 77(6), 351-359.

Fuchs, L. S., Fuchs, D., Craddock, C., Hollenbeck, K. N., & Hamlett, C. L. (2008). Effects of small-group tutoring with and without validated classroom instruction on at-risk students' math problem solving: Are two tiers of prevention better than one? *Journal of Educational Psychology*, *100*(3), 491-509.

Fuchs, L. S., Fuchs, D., Finelli, R., Courey, S. J., & Hamlett, C. L. (2004). Expanding schema-based transfer instruction to help third graders solve real-life mathematical problems. *American Educational Research Journal*, *41*(2), 419–445.

Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlett, C. L., Owen, R., et al. (2003a). Explicitly teaching for transfer: Effects on third-grade students' mathematical problem solving. *Journal of Educational Psychology*, *95*(2), 293-305.

Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlett, C. L., Owen, R., et al. (2003b). Enhancing third-grade students' mathematical problem solving with self-regulated learning strategies. *Journal of Educational Psychology*, *95*(2), 306-315.

Fuchs, L. S., Fuchs, D., Prentice, K., Hamlett, C. L., Finelli, R., & Courey, S. J. (2004). Enhancing mathematical problem solving among third-grade students with schema-based instruction. *Journal of Educational Psychology*, *96*(4), 635-647.

Fuchs, L. S., Seethaler, P. M., Powell, S. R., Fuchs, D., Hamlett, C. L., & Fletcher, J. M. (2008). Effects of preventative tutoring on the mathematical problem solving of third-grade students with math and reading difficulties. *Exceptional Children, 74*(2), 155-173.

Jitendra, A. K., Griffin, C. C., McGoey, K., Gardill, M. C., Bhat, P., & Riley, T. (1998). Effects of mathematical word problem solving by students at risk or with mild disabilities. *The Journal of Educational Research, 91*(6), 345–355.

Xin, Y. P., Jitendra, A. K., & Deatline-Buchman, A. (2005). Effects of mathematical word-problem-solving instruction on middle school students with learning problems. *Journal of Special Education, 39*(3), 181–192.

The aforementioned research demonstrates that instruction on solving word problems based on underlying problem structure leads to statistically significant positive effects on measures of word problem solving. Three of the randomized controlled trials isolated this practice. In these studies, interventionists taught students to identify problems of a given type by focusing on the problem structure and then to design and execute appropriate solution strategies for each problem. These techniques typically led to significant and positive effects on word-problem outcomes for students

Six of the randomized controlled trials took the instructional intervention on problem structure a step further. They demonstrated that teaching students to distinguish superficial from substantive information in problems also leads to marginally or statistically significant positive effects on measures of word problem solving. After students were explicitly taught the pertinent structural features and problem-solution methods for different problem types, they were taught superficial problem features that can change a problem without altering its underlying structure. They were taught to distinguish substantive information from superficial information in order to solve problems that appear new but really fit into one of the categories of problems they already know how to solve. They were also taught that the same underlying problem structures can be applied to problems that are presented in graphic form (for example, with tables or maps). These are precisely the issues that often confuse and derail students with difficulties in mathematics. These six studies consistently demonstrated marginally or statistically significant positive effects on an array of word problem-solving proficiencies for students experiencing difficulties in mathematics. (Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. [2009])

UNIVERSAL SCREENING

A Universal Screening/Baseline Assessment must be given BEFORE any intervention actually begins. Additionally, the student must complete the assessment INDEPENDENTLY without any assistance so as to get an accurate picture of where he/she is functioning. It is the Universal Screening that alerts the teacher/tutor to the need for further intervention. Other factors may also indicate the need for intervention such as poor classroom performance, substandard scores on standardized tests, and/or low scores on common formative assessments. The Universal Screening for the 'I DO - WE DO - YOU DO' Math Problem Solving Intervention is a sample math word problem from the student's grade level and is identical to the data point assessments given weekly. Each assessment is scored using a rubric designed specifically to assess five key elements of math problem solving. Developed by Lynda Clary-Burke, an elementary school teacher in Henry County, Georgia, the problem solving rubric gets to the core of where the student is struggling and gives the teacher/interventionist/tutor valuable information as to what to emphasize or focus on in future intervention sessions. The continuity between the Universal Screening and the Data Point Assessments makes the analysis of the data collected throughout the intervention period easier to read and understand. An educator will essentially be comparing 'oranges to oranges' since the assessments are the same (the problems are different for each assessment but the design and the processes for completion are identical).

PROGRESS MONITORING

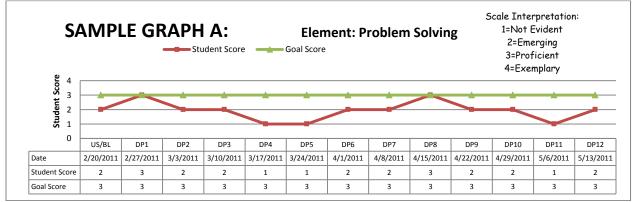
As previously stated, in order to see whether or not the 'I DO - WE DO - YOU DO' Math Problem Solving Intervention is effective, data should be gathered on a weekly basis through data point assessments. As with the Universal Screening, the student completes each data point assessment INDEPENDENTLY without assistance. Each assessment is scored using the rubric below the actual problem the student completes. The rubric assesses the following five problem solving elements: Problem Solving, Reasoning and Proof, Communications, Connections, and Representation. Each element is scored on a scale of '1' to '4' with '3' being the goal score (proficient). The 1 – 4 scale is defined by the following descriptors:

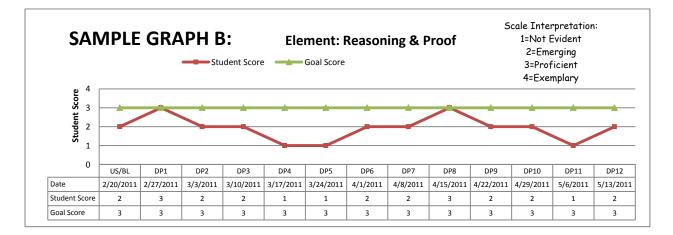
- 1 = Not Evident
- 2 = Emerging
- 3 = Proficient
- 4 = Exemplary

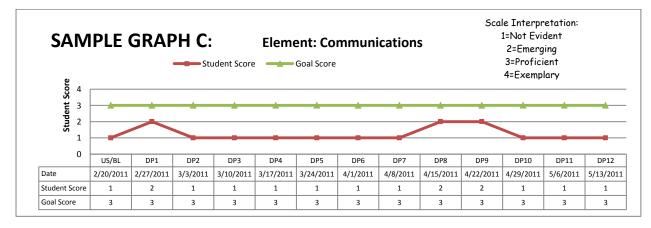
PROGRESS MONITORING GRAPHS AND DATA ANALYSIS

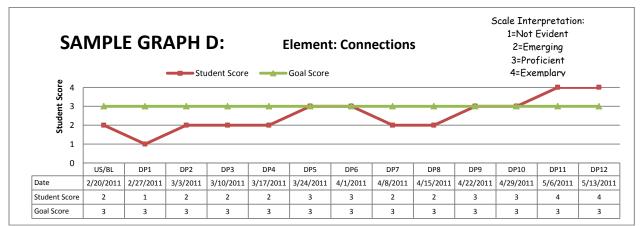
For the purpose of collecting data for the 'I DO - WE DO - YOU DO' Math Problem Solving Intervention, a total of five graphs are needed; one for each of the five elements from the assessment rubric. The graphs that follow are examples of how the data should be documented and what each graph *may* look like after a 12 week implementation period is complete. Careful examination of the data collected each week must occur (preferably in the context of a data analysis team) in order to adequately assess the effectiveness of the intervention and to pinpoint areas of weakness. This on-going weekly review of the data is crucial and should be the catalyst which drives future instruction for the struggling student.

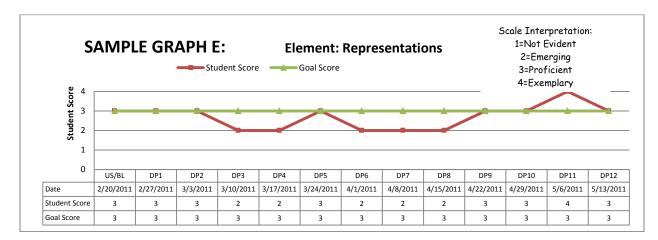
SAMPLE GRAPHS FOR STUDENT 'X':











What do the sample graphs on the previous page tell us about Student 'X'? By looking at each element's graph separately, one can pinpoint that this student mostly struggles with the communications aspect of problem solving. This gives the teacher/tutor valuable information which should be used to guide future instruction with this student. The teacher/tutor will know that the student needs lots of practice 'thinking aloud' and explaining the processes he/she uses to solve a problem. The teacher/tutor should allow ample time for open and thought provoking dialog to occur as the student works through the processes of problem solving and should provide instant feedback and encouragement to reassure the student as he/she works through the intervention problems. The graphs above also show that the student has made great strides in being able to make connections to similar problems or ideas as well as being able to create representations to solve problems. However, continued focus on reasoning and proof and problem solving are needed to ensure a greater likelihood of overall success.

DOCUMENTATION FOR PROGRESS MONITORING

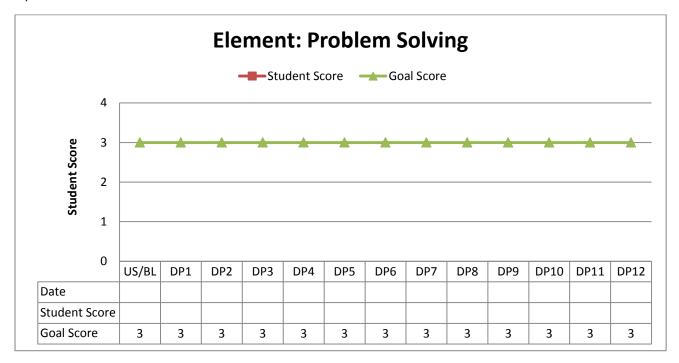
After each weekly data point assessment, the teacher/tutor should plot the scores on the five graphs on the following 2 pages. Graphs are an easy-to-read 'snap shot' of how the student performs each week and are an excellent tool to use when looking at overall progress and effectiveness of the intervention. The data should be analyzed weekly rather than at the end of the 12 weeks so that changes or adjustments to the intervention may be made DURING the 12 week period. The progress monitoring graphs on the following two pages can be used for any grade (in this manual grades 1 through 5 are the focus but the same process can be used for grades higher than 5).

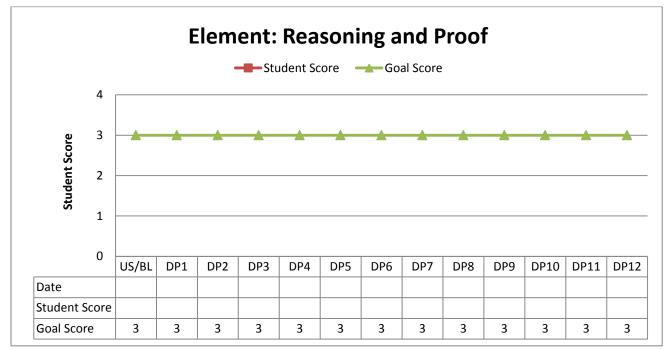
SPECIAL NOTE: The word problems in each section of this manual represent appropriate grade level problems based on the Georgia Performance Standards (GPS). If the problems designated for a particular grade level are too difficult for a student in need of the 'I DO - WE DO - YOU DO' intervention, then use the materials for the grade level below the grade of the student. Although mathematical computation is important, the main purpose of the 'I DO - WE DO - YOU DO' intervention is to teach students the underlying structures and processes of problem solving.

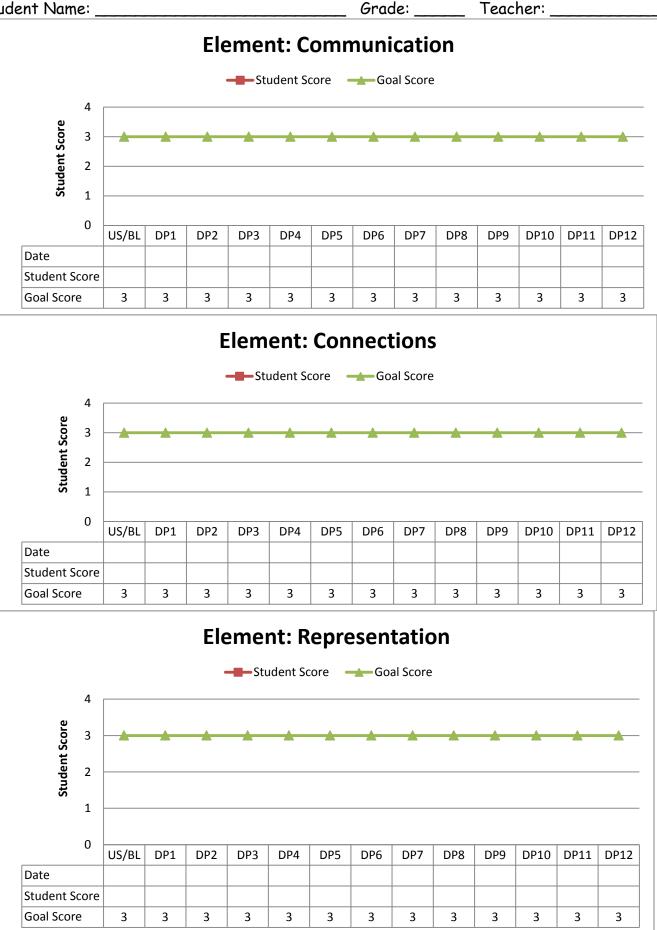
| Student Name: | Grade: | Teacher: |
|---------------|--------|----------|
|---------------|--------|----------|

'I DO - WE DO - YOU DO' PROGRESS MONITORING

Plot below the score of each element assessed on a scale from 1-4 with the goal score equaling 3 (the goal line has already been graphed). Each of the 5 graphs that follow represent one of the five Problem Solving elements. Be sure to include the Universal Screening/Baseline (assessed BEFORE the intervention began) so as to have a point to which other assessments can be compared.







IMPLEMENTATION OF THE 'I DO - WE DO - YOU DO' INTERVENTION

Make a copy of all 'Problem Solving Cards' for the grade level needed. There are a total of 36 Problem Solving Sheets per grade level. However, if a skill is not covered or more cards are needed, feel free to create your own using the blank template on page 73.

Below are the steps that need to be followed for each intervention session:

<u>STEP ONE</u>: Teacher/tutor/interventionist uses the darkly shaded "<u>TEACHER MODELS</u>" card to show the student the steps in the problem solving process (reading the problem, talking about the problem, writing how to solve the problem, and then solving the problem using pictures, words, or numbers).

<u>STEP TWO</u>: The teacher/tutor/interventionist *and* the student *work together* using the lightly shaded "<u>TEACHER AND STUDENT COLLABORATE</u>" card to solve a similar problem. <u>THE TEACHER WALKS THE STUDENT THROUGH EACH STEP AND PROVIDES FEEDBACK</u> <u>AND ENCOURAGEMENT THROUGHOUT</u>.

<u>STEP THREE</u>: The student uses the "<u>STUDENT COMPLETES INDEPENDENTLY</u>" card to solve another similar problem independently (as teacher/tutor/interventionist looks on and supervises). If the student 'gets stuck', the teacher/tutor/interventionist should refer back to the "<u>TEACHER MODEL</u>" problem and review and reteach if necessary.

DELIVERY METHOD

The 'I DO - WE DO - YOU DO' math problem solving intervention is most conducive to one-on-one instruction in which the teacher/tutor works individually with the student. However, this intervention can also be implemented with a small group of two to five students. If a small group approach is used, be sure that every student in the group has his/her own set of 'Problem Solving Cards'.

INTERVENTION SESSIONS

A total of 36 "I DO - WE DO - YOU DO' Problem Solving Cards are included in this manual for each grade $1^{st} - 5^{th}$ and cover a variety of problems appropriate for the specified grade level. Each card is designed to represent one complete RTI intervention session lasting approximately 20 minutes. It is **imperative** that each intervention session follow the specific steps listed above and is completed in a **thorough** manner. Going over each problem briefly or just handing the student a sheet to complete is **NOT** a part of this intervention. The 'I DO - WE DO - YOU DO' Math Problem Solving Intervention is intended to address areas of weakness and actually impact overall student performance in the area of math problem solving.

LENGTH OF INTERVENTION

The 'I DO - WE DO - YOU DO' intervention is designed to be implemented three times per week for 20 minutes per session for a total of 12 weeks. Weekly data point assessments are given on a day in which an intervention session does not occur (i.e., Intervention Sessions = M, Tu, W, Assessment = Friday).

I DO WE DO YOU DO

FIRST GRADE

Date:

Math Problem Solving RTI Progress Monitoring Assessment <u>SAMPLE</u>

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #SAMPLE (given to student after completing ____ weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem | Step Three: Solve the problem using | |
|--|---|--|--|
| | and write HOW you will solve the | pictures, words, or numbers. | |
| Teddy the bear chased 4 hunters up a tree on Monday and 7 hunters up a tree on Tuesday. | problem on the lines below: <u>First I</u> would think about the problem and create <u>a movie in my head. I would see a bear</u> <u>chasing hunters through the woods and up</u> <u>into a tree. On the first day (Monday) I</u> would see 4 men in a tree with Teddy | | |
| How many more hunters did Teddy chase up a tree on Tuesday than Monday? <u>3</u> | looking at them from the bottom and I would see 7 hunters in the tree on Tuesday. I noticed the words 'How many more' and know that I need to subtract the amount of men in the tree on Monday from the amount of men in the tree on Tuesday. | Monday=4 How many more. means suburaction 7-4=3 | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|----------------------------|--|---|---|--|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations of e labeled anacorpect. |
| | correct the problem. | All of the student's math thinking is correct. | arrived at the answer(s). | showed how this problem is like another problem. | labeled anacorrect. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her a | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answers correct. | | No one had to cress about the stylent's lines of thinking or his/her answer(s). | some other work aid he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident 1 | The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the | The student used no math language and/or math notation. The student needs help to show him/her where | The student did not notice anything about the problem or the numbers in his/her work. The student needs help | The student did not use a math representation to help solve the problem and explain his/her work. The student needs help |
| T | solve the problem. | errors. | he/she could have used math language and/or math notation. | in making connections to other work and strategies. | to understand how to do this better. |
| | Score: <u>3</u> | Score: <u>3</u> | Score: <u>3</u> | Score: <u>3</u> | Score: <u>4</u> |

UNIVERSAL SCREENING/BASELINE ASSESSMENT 1st grade

Directions: Have the student complete the baseline assessment on this page before beginning the "I DO - WE DO - YOU DO" Math Problem Solving Intervention. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|----------------------------|---|---|
| There are 3 red grapes | problem on the lines below: | |
| on the table. Laura puts 2 | | |
| green grapes on the | | |
| table. | | |
| How many grapes are | | |
| there in all? | | |
| | | |
| | | |

| | Score: | Score: | Score: | Score: | Score: |
|-------------------------|---|---|--|---|---|
| 1 | solve the problem. | errors. | he/she could have used math language and/or math notation. | in making connections to other work and strategies. | to understand how to do this better. |
| 1 | understanding the problem and choosing a strategy to | finding, understanding, and correcting the | The student needs help to show him/her where | The student needs help | The student needs help |
| Evident | The student needs help in | The student needs help | math notation. | problem or the numbers in his/her work. | help solve the problem and explain his/her work. |
| Not | The student did not understand the problem. | The student's math thinking is not correct. | The student used no math language and/or | The student did not notice anything about the | The student did not use a math representation to |
| | understanding how to finish the problem. | | his/her work. | | thinking |
| 6 | for part of the problem. He/she needs help in | F | language could have been used more effectively in | what he/she knows and understands. | making representations that really show his/her |
| 2 | The student's strategy works | understanding the problem. | in understanding the where and why math | The student needs help in making connections to | The student needs help |
| | understand how to understand the entire problem. | The student needs clarity to help in | The student needs help | the problem. | and explain his/her work, but it has mistakes in it. |
| Emerging | part of the problem. Teacher needs to help the student | math thinking is correct. | math language and/or math notation. | notice something, but it is not about the math in | math representation to help solve the problem |
| | The student only understood | Some of the student's | The student used some | The student tried to | The student tried to use |
| | | | of thinking or his/her answer(s). | way. | |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines | some other work and he/she noted it in some | it is labeled and correct. |
| ~ | works. | | throughout his/her work. | about his/her work that reminded him/her of | solve the problem and explain his/her work, and |
| Proficient | problem and his/her strategy | thinking is correct. | language and/or notation | something mathematical | representation to help |
| | The student understood the | thinking is correct. All of the student's math | The student used math | is like another problem. The student noticed | The student used a math |
| | correct the problem. | All of the student's math | arrived at the answer(s). | showed how this problem | iubelea ana correct. |
| - | error was discovered and what should be done to | problem. | step-by-step how he/she arrived at the answer(s). | And/or the student | representations are labeled and correct. |
| 4 | he/she explained how the | it was used to solve this | clear. He/she showed | answer | All of the student's |
| Λ | If the student found errors | Or, the student explained a rule and how | The paths of the student's thinking were | strategies & he/she used that to extend his/her | another way. |
| | the strategy is correct. | | 5 | math big ideas, or math | explain his/her work in |
| Exemplary | noted a rule in the solution. He/she clearly verified that | a math idea that he/she used in his/her plan. | and /or notation throughout his/her work. | in his/her work that reminded him/her of | representation to help solve the problem and |
| | problem. He/she used and | he/she knew more about | specific math language | something mathematical | another math |
| i ol foi maneo | The student understands the | The student showed that | The student used a lot of | The student noticed | The student used |
| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |

Date: _____

Math Problem Solving RTI Progress Monitoring Assessment – 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #1 (given to student after completing 1 week of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|--|---|
| Dante put 3 books on the shelf. His friend Tray put 4 more books on the shelf. How many books are there now? | problem on the lines below: | |

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|--|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| Proficient 3 | The student understood the problem and his/her strategy works. The student's answer is correct. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. No one had to guess about the student's lines | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of some other work and he/she noted it in some | The student used a math representation to help solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging 2 | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. The student's strategy works for part of the problem. He/she needs help in understanding how to finish | Some of the student's math thinking is correct. The student needs clarity to help in understanding the problem. | of thinking or his/her answer(s). The student used some math language and/or math notation. The student needs help in understanding the where and why math language could have been used more effectively in his/her work. | way. The student tried to notice something, but it is not about the math in the problem. The student needs help in making connections to what he/she knows and understands. | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. The student needs help making representations that really show his/her thinking |
| Not Evident 1 | the problem. The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to solve the problem. | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the errors. | The student used no math language and/or math notation. The student needs help to show him/her where he/she could have used math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. The student needs help in making connections to other work and strategies. | The student did not use a math representation to help solve the problem and explain his/her work. The student needs help to understand how to do this better. |
| | Score: | Score: | | | Score: |

Date: _____

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #2 (given to student after completing 2 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|-----------------------------|---|---|
| Eight puppies are in the | problem on the lines below: | using pictules, words, or humbers. |
| cage. Princess takes two | | |
| out of the cage. How | | |
| many are still in the cage? | | |
| | | |
| | | |
| | | |
| | | |

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Date: __

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #3 (given to student after completing 3 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Barbie has 4 dimes. She loses 2 dimes. | problem on the lines below: | using pierares, words, or humbers. |
| How many dimes does she have left? | | |
| How much money does she have left? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem is like another problem. | All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

24

Date: __

Math Problem Solving RTI Progress Monitoring Assessment – 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #4 (given to student after completing 4 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| Carlos has 5 yellow blocks. He also has 6 purple blocks. | problem on the lines below: | |
| How many more purple blocks does he have than yellow blocks? | | |

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. Or, the student | The student used a lot of specific math language and /or notation throughout his/her work. The paths of the | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math strategies & he/she used | The student used another math representation to help solve the problem and explain his/her work in another way. |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | that to extend his/her answer And/or the student showed how this problem is like another problem. | All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Date:

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #5 (given to student after completing 5 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|--|---|
| Kermit jumps 3 miles every day. How many miles will he jump in 2 days? | problem on the lines below: | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student | All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Date: ____

Math Problem Solving RTI Progress Monitoring Assessment – 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #6 (given to student after completing 6 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|----------------------------|--|---|
| Kenny bought a total of | problem on the lines below: | |
| 16 toy cars. Two of the | | |
| cars are blue and six of | | |
| the cars are red. | | |
| | | |
| How many cars are not | | |
| blue or red? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

1ST GRADE

Date: ____

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #7 (given to student after completing 7 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Fannie has 50 magazines. How many stacks of 10 magazines does she have? | problem on the lines below: | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

-

Date: __

Math Problem Solving RTI Progress Monitoring Assessment – 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #8 (given to student after completing 8 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem | Step Three: Solve the problem |
|--|--|------------------------------------|
| Lester has 72 plants. Louise has 58 plants. Darlene has fewer plants than Lester but more plants than Louise. How many plants might | and write HOW you will solve the problem on the lines below: | using pictures, words, or numbers. |
| Darlene have? | | |
| 73 plants | | |
| 57 plants | | |
| 70 plants | | |
| 56 plants | | |
| NOW | | |
| Step Two: Think about and talk | | |
| about the problem | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Date: _____

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #9 (given to student after completing 9 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|-------------------------------|---|---|
| Ronald's dog weighs 36 | problem on the lines below: | |
| pounds. Billy's dog weighs 1 | | |
| pound more than Ronald's dog. | | |
| Janet's dog weighs 1 pound | | |
| less than Ronald's dog. | | |
| How much does Billy's dog | | |
| weigh? | | |
| How much does Janet's dog | | |
| weigh? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

30

Date: _

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #10 (given to student after completing 10 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| Beatrice used 14 strawberries to decorate cupcakes for her children. If each cupcake has 2 strawberries, how many children does Beatrice have? | problem on the lines below: | using pictures, words, or numbers. |
| | | |

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Date: _

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #11 (given to student after completing 11 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|----------------------------|---|---|
| Scotty made 36 canoes | problem on the lines below: | |
| last year and 49 canoes | | |
| this year. How many more | | |
| canoes did he make this | | |
| year than last year? | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|--|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient 3 | The student understood the problem and his/her strategy works. The student's answer is correct. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. No one had to guess about the student's lines of thinking or his/her answer(s). | The student noticed something mathematical about his/her work that reminded him/her of some other work and he/she noted it in some way. | The student used a math representation to help solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging 2 | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the problem. | The student used some math language and/or math notation. The student needs help in understanding the where and why math language could have been used more effectively in his/her work. | The student tried to notice something, but it is not about the math in the problem. The student needs help in making connections to what he/she knows and understands. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. The student needs help making representations that really show his/her thinking |
| Not Evident 1 | The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to solve the problem. | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the errors. | The student used no math language and/or math notation. The student needs help to show him/her where he/she could have used math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. The student needs help in making connections to other work and | The student did not use a math representation to help solve the problem and explain his/her work. The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | strategies. Score: | Score: |

32

Date: _____

Math Problem Solving RTI Progress Monitoring Assessment - 1st grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #12 (given to student after completing 12 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Mr. Price has 16 people in his exercise class but only has 11 mats. How many more people than mats are there? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

1ST GRADE

I DO WE DO YOU DO

Math Problem Solving Cards – 1st Grade

| St | udent Var.e: | 1PLE | Date: |
|---|--|--|--|
| DO | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| ΓC | There are 2 ladybugs. There are 3 bees. There are 3 flies. | <u>First I would think about what the</u> <u>problem wants me to find out. It</u> <u>says I need to find out how many</u> <u>insects there are in all. I know that</u> | |
| SAMPLE CARD Teacher Models | How many insects are there in all? <u>8</u> NOW Step Two: Think about and talk about the problem | ladybugs are insects. I know that bees are insects. I know that flies are insects too. I would add the three numbers to get my answer. I would also think in my head what the problem would look like. I see myself surrounded by 2 ladybugs, 3 bees, and 3 flies. I am counting them all to get my answer. | 2+3+3=8 |
| Q | Step One: Read the problem | Step Three : Write HOW you will solve the problem on the lines | Step Four: Solve the problem using pictures, words, or numbers. |
| WE I | There is 1 rose. There are 2 tulips. | below: <u>When we read the problem we</u> <u>know we have to find out how</u> <u>many flowers there are in all. The</u> | 1 tose 2 tulips 3 daisies |
| SAMPLE CARD Teacher & Student Collaborate | There are 3 daisies. How many flowers are there in all? <u>6</u> NOW Step Two: Think about and talk about the problem | words 'in all' mean we need to add the numbers. We know that a rose is a flower as well as tulip and a daisy so we'll add the numbers 1 (for the rose), 2 (for the tulips), and 3 (for the daisies). We will draw a picture of all of the flowers to give us a visual of what the problem looks like. | 17035 17035 17035 17035 1703 17 |
| YOU DO | Step One: Read the problem There are 3 little balls. There are 2 medium sized balls. | Step Three: Write HOW you will solve the problem on the lines below: <u>I read the problem and it tells me</u> to find out how many balls there are in all I know that IN ALL | Step Four: Solve the problem using pictures, words, or numbers. |
| SAMPLE CARD Student Completes Independently | There are 4 big balls. How many balls are there in all? <u>9</u> NOW Step Two: Think about and talk about the problem | are in all. I know that IN ALL means to add. I will draw a picture that shows 3 little balls, 2 medium sized balls, and 4 big balls. I'll write the word BIG on all the big balls, the word MEDIUM on all the medium balls, and the word LITTLE on all the little balls. I will count how many balls there are in all. The problem I will write down will be $4 + 2 + 3$. | Medium Medium Medium big_t medium = 2 little = 3 t+2+3=9 |

| | Student Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem There are 3 black cats. There are 4 white cats. There are 2 brown dogs. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 1 Teacher Models | How many cats are there in all? NOW Step Two: Think about and talk | | |
| | about the problem | | |
| WE DO | Step One: Read the problem There are 6 yellow flowers. There are 2 purple flowers. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | There are 5 trees. | | |
| Teacher & Student Collaborate | How many flowers are there in all? | | |
| Card 1 | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One : Read the problem There are 4 little elephants. There are 8 tall giraffes. There are 5 big elephants. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 1 Student Completes Independently | How many elephants are there in all? NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem 5 owls sit in a tree. 1 more owl joins them. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Teacher Models | How many owls are there total? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem 4 children are sitting at the table. 3 more children come and sit at the table. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Teacher & Student Collaborate | How many children total are sitting at the table? | | |
| Card 2 7 C | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem 6 flowers bloomed on Monday and 3 flowers bloomed on Wednesday. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Student Completes Independently | How many flowers bloomed total? | | |
| Card 2 In | NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | Date: | |
|--|---|--|--|
| I DO | Step One: Read the problem Which number sentence is correct? 3 + 4 = 5 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Teacher Models | 5 + 2 = 4 6 + 1 = 7 NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Which number sentence is correct? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Teacher & Student Collaborate | 2 + 4 = 9 3 + 6 = 9 8 + 2 = 7 NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Which number sentence is correct? 3 + 5 = 8 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Student Completes Independently | 2 + 2 = 5 2 + 0 = 8 9 + 0 = 8 NOW Step Two: Think about and talk about the problem | | |

| St | Student Name: Date: | | | | |
|--|--|--|--|--|--|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem | | |
| Q | Which is a way to make 6? | solve the problem on the lines below: | using pictures, words, or numbers. | | |
| н | 2 + 1 | | | | |
| s | 3 + 1 | | | | |
| r Mode | 4 + 1 | | | | |
| Card 4 Teacher Models | 5 + 1 | | | | |
| Card | NOW Step Two: Think about and talk about the problem | | | | |
| 0 | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines | Step Four: Solve the problem using pictures, words, or numbers. | | |
| WE DO | Which is a way to make 5? | below: | using pierures, words, or numbers. | | |
| > | 4 + 2 | | | | |
| ent | 5 + 5 | | | | |
| & Stud Ite | 3 + 2 | | | | |
| Teacher & Student Collaborate | 6 + 1 | | | | |
| Card 4 | NOW Step Two: Think about and talk about the problem | | | | |
| 0 | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines | Step Four: Solve the problem using pictures, words, or numbers. | | |
| YOU DO | Which is a way to make 7? | below: | | | |
| Х | 6 + 0 | | | | |
| tes | 3 + 4 | | | | |
| Complet ntly | 7 + 1 | | | | |
| Card 4 Student Completes Independently | 5 + 3 | | | | |
| Card 4 | NOW Step Two: Think about and talk about the problem | | | | |

| | Student Name: | Date: | |
|--|--|---|--|
| I DO | Step One: Read the problem Alice buys a doll for 5 cents. Alice buys a ball for 4 cents. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher Models | How much money does Alice spend in all? NOW Step Two: Think about and talk about the problem | | |
| Card 5 Teacher & Student Collaborate | Step One: Read the problem Frank sells his toy car for 7 dollars. Frank sells his toy airplane for 3 dollars. How much money did Frank make? NOW Step Two: Think about and talk about the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| you do | Step One: Read the problem Mrs, Allen buys milk for \$2. She buys bread for \$1. She buys meat for \$4. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Student Completes Independently | How much did Mrs. Allen spend on groceries? NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | Date: | |
|---|--|--|--|
| I DO | Step One: Read the problem There are 4 apples on the table. Erin eats 2 apples. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Teacher Models | How many apples are left? NOW Step Two: Think about and talk about the problem | | |
| Card 6 Teacher & Student Collaborate | Step One: Read the problem Buster the dog sees 5 cats in the yard. He barks and 4 cats run away. How many cats are still in the yard? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Student Completes Independently | about the problem Step One: Read the problem There are 7 coconuts in the coconut tree. Tarzan climbs the tree and throws down 3 coconuts. How many coconuts are still in the tree? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 I | NOW Step Two: Think about and talk about the problem | | |

| | Student Name: Date: | | | | |
|--|--|--|--|--|--|
| I DO | Step One: Read the problem There are 7 fish in the lake. Bob catches 2 fish. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. | | |
| Card 7 Teacher Models | How many fish are still in the lake? NOW Step Two: Think about and talk about the problem | | | | |
| WE DO | Step One: Read the problem There are 8 books on the shelf. Sally takes 4 books home to read. How many | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. | | |
| Card 7 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem | | | | |
| YOU DO | Step One: Read the problem There are 6 chairs around the kitchen table. Buster | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. | | |
| Card 7 Student Completes Independently | takes a chair outside and Stella takes a chair to her room. How many chairs are still at the kitchen table? NOW Step Two: Think about and talk about the problem | | | | |

| St | udent Name: | Date: | |
|--|--|--|--|
| I DO | Step One: Read the problem Ginger has 3 dimes. She looses 1 dime. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 Teacher Models | How many dimes does she have left? How much money does she have left? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Jamal put 5 quarters in his pocket to pay for lunch. He lost 2 quarters on his way to school. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| d 8 Teacher & Student Collaborate | How many quarters did Jamal have left to give to the cashier? How much money did he have left? | | |
| Care | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Mrs. Roma had 8 dimes. She gave 1 dime to Hector. She gave 2 dimes to Maria. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 Student Completes Independently | How many dimes did she have left? How much money did she have left? NOW Step Two: Think about and talk about the problem | | |

| Student Name: Date: | | | | |
|--|---|--|--|--|
| I DO | Step One: Read the problem There are 8 red books. There are 5 blue books. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. | |
| Card 9 Teacher Models | How many more red books are there than blue books? NOW Step Two: Think about and talk about the problem | | | |
| WE DO | Step One: Read the problem Jose has 7 sticks of gum. Rafael has 6 sticks of gum. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. | |
| Card 9 Teacher & Student Collaborate | How many more sticks of gum does Jose have than Rafael? NOW Step Two: Think about and talk | | | |
| you do | about the problem Step One : Read the problem Patty has 4 tomatoes on her tomato plant. Chloe has 9 tomatoes on her tomato | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. | |
| Card 9 Student Completes Independently | plant. How many more tomatoes does Chloe have than Patty? NOW Step Two: Think about and talk about the problem | | | |

| St | udent Name: | Date: | |
|---|---|--|--|
| I DO | Step One: Read the problem Sue lives 3 miles from school. How many miles will she travel on one school | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher Models | day? How many miles will she travel on two school days? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Gonzo the goose flies 7 miles each day. How many miles will he fly in 2 days? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher & Student Collaborate | How many miles will he fly in 3 days? NOW Step Two: Think about and talk | | |
| Card 10 Student Completes YOU DO Independently | Step Two: Think about and talk about the problem Step One: Read the problem Rudy rides his pony for 5 miles every day. How many miles will he have ridden after 2 days? How many miles will he have ridden after 3 days? NOW Step Two: Think about and talk about the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|--|---|---|--|
| I DO | Step One: Read the problem Jill has 7 cookies. Two of the cookies are | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Teacher Models | lemon. Two of the cookies are chocolate. How many cookies are not lemon or chocolate? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Nancy has 12 coins total. Three of the coins are guarters. Five of the coins | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Teacher & Student Collaborate | are nickels. How many coins are not quarters or nickels? NOW Step Two: Think about and talk about the problem | | |
| Card 11 Student Completes Independently YOU DO | Step One: Read the problem Randall bought a total of 15 marbles. Two of the marbles were yellow and eight of the marbles were blue. How many marbles are not yellow or blue? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| St | ude | ent Name: | | | Date: |
|---|---|--|---------------------|--|--|
| I DO | St W | Step One: Read the problem What is the rule for this table? WHAT IS THE RULE? | | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Teacher Models | | 3 5 2 | 6 8 5 | | |
| Card 1 | St | DW ep Two: Think out the probler | about and talk n | | |
| we do | Step One: Read the problem What is the rule for this | | | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | | 1 | THE RULE? 5 | | |
| 12 Teacher & Student Collaborate | | 4 6 | 8 10 | | |
| Card 12 Te Col | St ab | DW ep Two : Think out the probler | n | | |
| YOU DO | Step One : Read the problem What is the rule for this table? | | | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Х | | WHAT IS | THE RULE? 10 | | |
| ent Completes Idently | | 0 5 | 2 7 | | |
| Card 12 Student Completes Independently | St | DW ep Two : Think out the probler | about and talk n | | |

| | Student Name: | | Date: |
|---|--|---|--|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| DQ | Use the number line to find out which number sentences are | solve the problem on the lines below: | using pictures, words, or numbers. |
| н | correct below. | | |
| | ▲ | | |
| dels | correct. | | |
| Card 13 Teacher Models | 8 + 1 = 9 | | |
| ache | 6 - 3 = 2 | | |
| E Te | 5 - 2 = 3 | | |
| q 13 | 4 + 6 = 10 | | |
| Car | NOW | | |
| | Step Two: Think about and talk about the problem | | |
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| 2 | Use the number line to find out | solve the problem on the lines below: | using pictures, words, or numbers. |
| WE | which number sentences are | | |
| ≥ | correct below. | | |
| | 0 1 2 3 4 5 6 7 8 9 10 | | |
| int | Circle all problems that are | | |
| Teacher & Student Collaborate | correct. | | |
| r & S Ite | 10 - 4 = 4 1 + 1 = 3 | | |
| Teacher & Collaborate | 7+2=9 | | |
| Tea Collo | 7 - 3 = 4 | | |
| d 13 | NOW | | |
| Care | Step Two: Think about and talk | | |
| | about the problem | | |
| Q | Step One: Read the problem | Step Three : Write HOW you will solve the problem on the lines | Step Four: Solve the problem using pictures, words, or numbers. |
| | Use the number line to find out | below: | using pierules, words, or numbers. |
| VOV | which number sentences are | | |
| × | correct below. | | |
| | 0 1 2 3 4 5 6 7 8 9 10 | | |
| S | Circle all problems that are | | |
| pleto | correct. | | |
| . Com ntly | 6 - 6 = 6 | | |
| ident | 5 + 0 = 5 | | |
| Card 13 Student Completes Independently | 4 - 2 = 3 | | |
| ч 1 1 | 6 + 3 = 9 NOW | | |
| Car | Step Two: Think about and talk | | |
| | about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| D | What are the fact family | solve the problem on the lines below: | using pictures, words, or numbers. |
| н | sentences for the following | Delow. | |
| | numbers? | | |
| Card 14 Teacher Models | 6 2 8 | | |
| | about the problem | | Stop Form: Salua the problem |
| WE DO | Step One: Read the problem What are the fact family sentences for the following numbers? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | 8 3 5 | | |
| Card 14 Teacher & Student Collaborate | | | |
| 0 | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| YOU DO | What are the fact family | solve the problem on the lines below: | using pictures, words, or numbers. |
| N | sentences for the following | | |
| | numbers? | | |
| Card 14 Student Completes Independently | 10 4 6 | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem What are the numbers in this fact family? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher Models | 6 + 2 = 8 2 + 6 = 8 8 - 2 = 6 8 - 6 = 2 NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem What are the numbers in this fact family? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher & Student Collaborate | 5 + 7 = 12 7 + 5 = 12 12 - 7 = 5 12 - 5 = 7 NOW Step Two: Think about and talk about the problem | | |
| you do | Step One: Read the problem What are the numbers in this fact family? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Student Completes Independently | $ \begin{array}{c} 4 + 5 = 9 \\ 5 + 4 = 9 \\ 9 - 5 = 4 \\ 9 - 4 = 5 \end{array} $ NOW Step Two: Think about and talk about the problem | | |

| St | Student Name: | | | | | | Date: |
|---|--|--|---|--|-----------------------|--|--|
| I DO | Use the question | graph be s below: | ead the elow to an ivorite | iswer the | 2 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher Models | How m rectan How m circles NOW | any chi gles? _ any moi than ti wo: Th | ldren lil re child riangles nink abc | ked _ Iren lik \$? | | | |
| WE DO | | graph be s below: | ad the elow to an avorite Red Blue | iswer the | | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher & Student Collaborate | Green How ma How ma How ma than gr NOW Step T about 1 | Green any chi any chi any moi reen? _ Two: Th the pro | Green Idren Iil Idren Iil re child nink abo blem | ke gree ked blu Iren like put and | en? ed red talk | | |
| you do | | graph be s below: | ad the alow to an Favorite Bird | Swer the | | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Student Completes Independently | Cat Dog How ma How ma How ma than bi | Cat Dog any chi any chi any moi irds? `wo: Th | Cat Dog Idren Iil Idren Iil re child | ked cat Iren lik | ed cats | | |

| | Student Name: | | Date: |
|---|--|---|--|
| I DO | Step One: Read the problem Shelly has 60 crayons. How many boxes of 10 crayons | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher Models | does she have? (use base-ten blocks to help illustrate this concept) NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Toby has 40 oranges. How many bags of 10 oranges can he make? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Chip has 80 tomatoes. How many bags of 10 tomatoes can he make? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Student Completes Independently | NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|---|
| DO | Step One: Read the problem Pears come in baskets of 10. | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| ΓC | Mr. Rogers has 4 baskets of pears with 6 pears left over. | | |
| Card 18 Teacher Models | How many pears does Mr. Rogers have? (use base-ten blocks to help illustrate this concept) | | |
| Care | NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Carrots come in bundles of 10. Samantha has 8 bundles of carrots with 9 carrots left over. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| 18 Teacher & Student Collaborate | How many carrots does she have in all? | | |
| Card 1 | NOW Step Two: Think about and talk about the problem | | |
| DO | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| уои | Cards come in boxes of 10. Roxie has 3 boxes of cards with 7 cards left over. How | | |
| Card 18 Student Completes Independently | many cards does she have total? | | |
| Card 1 | NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Jazmine puts her rings in 3 groups of 10. She has 5 rings left over. How many rings does Jazmine have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Teacher Models | (use base-ten blocks to help illustrate this concept) NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Jeff caught 4 groups of 10 fish with 8 left over. How many fish did Jeff catch? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Marie puts her pictures in 6 groups of 10 with 7 left over. How many pictures does Marie have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Student Completes Independently | NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Frank has won 18 games of checkers. John has won a greater number of games | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher Models | than Frank. Which answer below could be the number of games John has won? 23 games 18 games 17 games 4 games NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Todd read a greater number of pages than Anna. Anna read 25 pages. Which answer below could be the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher & Student Collaborate | number of pages Todd read? 25 pages 24 pages 28 pages 15 pages NOW Step Two: Think about and talk about the problem | | |
| s you do | Step One: Read the problem Erica swam 5 laps in the pool. Marlie swam a greater number of laps than Erica. Which answer below could be the number of laps Marlie swam? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Student Completes Independently | 3 laps 4 laps 5 laps 6 laps NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|---|---|--------------------------------|------------------------------------|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| Q | Bennie has 32 teddy bears. | solve the problem on the lines | using pictures, words, or numbers. |
| Δ | Jenna has 31 teddy bears. | below: | |
| н | Hailey has less teddy bears | | |
| | than Bennie or Jenna. How | | |
| | many teddy bears might | | |
| lels | Hailey have? | | |
| Woo | 33 teddy bears | | |
| icher | 32 teddy bears | | |
| Card 21 Teacher Models | 31 teddy bears | | |
| d 21 | 30 teddy bears | | |
| Car | NOW | | |
| | Step Two: Think about and talk | | |
| | about the problem Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| ро | Jenny sang 5 songs at the | solve the problem on the lines | using pictures, words, or numbers. |
| | concert. Rachel sang 7 songs | below: | |
| МE | at the concert. Maddie sang | | |
| > | less songs than Jenny or | | |
| | Rachel. How many songs | | |
| lent | might have Maddie sung? | | |
| Teacher & Student Collaborate | 3 songs | | |
| Teacher & Collaborate | 5 songs | | |
| each | 7 songs | | |
| 21 T Co | 9 songs | | |
| P Z | NOW | | |
| Ca | Step Two: Think about and talk about the problem | | |
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| D D | | solve the problem on the lines | using pictures, words, or numbers. |
| | Bob has 92 books. | below: | |
| VOU | Karen has 64 books. | | |
| ゞ | Susan has less books than | | |
| | Bob or Karen. How many books might Susan have? | | |
| Card 21 Student Completes Independently | - | | |
| | 94 books | | |
| ent Ca dentl | 92 books | | |
| Stude lepen | 64 books | | |
| 21 (Ind | 32 books | | |
| Card | NOW Step Two: Think about and talk | | |
| | about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Which symbol would make the problem below true? 84 92 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher Models | < | | |
| WE DO | Step One: Read the problem Which symbol would make the problem below true? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher & Student Collaborate | 62 26 < > = NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Which symbol would make the problem below true? 49 53 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Student Completes Independently | < > NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Richie is 59 inches tall. Shirley is 53 inches tall. Robbie's height is less than Richie's but greater than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher Models | Shirley's. Which answer below might be Robbie's height? 60 inches 52 inches 57 inches 62 inches NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Mr. Campbell owns 97 cows. Mr. Barker owns 63 cows. Mr. Hart owns less cows than Mr. Campbell but more than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher & Student Collaborate | Mr. Barker. Which answer below might be the number of cows Mr. Hart owns? 52 cows 69 cows 97 cows 98 cows NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One : Read the problem Jake watched 54 movies in a year. Tuti watched 68 movies in a year. Carman watched more movies than Jake but less movies than Tuti. Which | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Student Completes Independently | answer below might be the number of movies Carman watched in a year? 69 movies 54 movies 53 movies 57 movies NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines | Step Four: Solve the problem using pictures, words, or numbers. |
| I DO | Hilda weighs 68 pounds. Marcus weighs 1 pound more than Hilda. Tiffany weighs 1 pound less than Hilda. | below: | |
| Card 24 Teacher Models | How much does Marcus weigh? How much does Tiffany weigh? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Ramon slept for 89 minutes. Pablo slept for 1 minute longer than Ramon. Oscar slept for 1 minute less than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 24 Teacher & Student Collaborate | Ramon. How many minutes did Pablo sleep? How many minutes did Oscar sleep? | | |
| Card | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Jamie found 74 seashells on the beach. Gary found 1 seashell more than Jamie. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Student Completes Independently | Wayne found 1 seashell less than Jamie. How many seashells did Gary find? How many seashells did Wayne find? NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Donna has 40 flowers. Jack has 10 flowers more than Donna. Betty has 10 flowers | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher Models | less than Donna. How many flowers does Jack have? How many flowers does Betty have? NOW Step Two: Think about and talk about the problem | | |
| we do | Step One : Read the problem Jackson has 60 CDs. Chrissy has 10 less CDs than Jackson. Amy has 10 more | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher & Student Collaborate | CDs than Jackson. How many CDs does Chrissy have? How many CDs does Amy have? NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Malik has 30 baseball cards. Jim has 10 more baseball cards than Malik. Mark has 10 less baseball cards than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Student Completes Independently | Malik. How many baseball cards does Jim have? How many baseball cards does Mark have? NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Mr. Marshall has 23 students in his class. About how many students does he have in his class? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher Models | About 10 students About 20 students About 30 students About 40 students NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Brandon ate 47 lemon drops. About how many lemon drops did he eat? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher & Student Collaborate | About 30 lemon drops About 40 lemon drops About 50 lemon drops About 60 lemon drops NOW Step Two: Think about and talk | | |
| you do | about the problem Step One: Read the problem Charlie took 74 steps. About how many steps did Charlie take? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Student Completes Independently | About 80 steps About 70 steps About 60 steps About 50 steps NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Count by tens. What number comes next? 6, 16, 26, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher Models | 27 30 36 40 NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Count by tens. What number comes next? 42, 52, 62, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher & Student Collaborate | 63 72 75 80 NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Count by tens. What number comes next? 11, 21, 31, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Student Completes Independently | 32 40 41 50 NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Count backward by tens. What numbers come next? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher Models | 86, 76, 66,,, 65, 64, 63 67, 68, 69 64, 62, 60 56, 46, 36 NOW Step Two: Think about and talk about the problem | | Step Form Colus the problem |
| WE DO | Step One: Read the problem Count backward by tens. What numbers come next? 62, 52, 42,,, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher & Student Collaborate | 32, 22, 12 41, 40, 39 43, 44, 45 62, 52, 42 NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Count backward by tens. What numbers come next? 57, 47, 37,,, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Student Completes Independently | 38, 39, 40 36, 35, 34 27, 17, 10 27, 17, 7 NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Teacher Models | the answers. Draw the picture that is third: Draw the picture that is first: Draw the picture that is fifth: NOW Step Two: Think about and talk about the problem | | |
| we do | Step One: Read the problem \bigtriangleup \bigcirc \bigcirc \bigcirc \checkmark \checkmark Use the pictures above to find the entropy | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Teacher & Student Collaborate | the answers. Draw the picture that is second: Draw the picture that is fourth: Draw the picture that is third: NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Use the pictures above to find the answers. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Student Completes Independently | Draw the picture that is fourth: Draw the picture that is sixth: Draw the picture that is seventh: NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|--|--|---|
| | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines | Step Four: Solve the problem using pictures, words, or numbers. |
| I DO | Mrs. Potter used 10 eggs to make omelets for her children. If each omelet has | below: | using pictures, words, or numbers. |
| Card 30 Teacher Models | 2 eggs, how many children does Mrs. Potter have? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Edie found 8 coins. She gave 2 coins to each person she met. How many people did | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Teacher & Student Collaborate | she meet? NOW Step Two: Think about and talk about the problem | | |
| Card 30 Student Completes YOU DO Independently | Step One: Read the problem Karlie used 6 sheets of wrapping paper to wrap gifts for her friends. Each sheet was big enough to wrap 2 gifts. How many gifts did Karlie wrap? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Jerry scores 4 soccer goals. Alma scores 3 soccer goals. Chris scores 5 soccer goals. | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Teacher Models | How many soccer goals did they score in all? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Lisa was sick for 4 days. Gerald was sick for 3 days. Teresa was sick for 3 days. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 1 31 Teacher & Student Collaborate | How many days were they sick? | | |
| Card | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One : Read the problem Nancy bought 7 Frisbees. Owen bought 4 Frisbees. Polly bought 2 Frisbees. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Student Completes Independently | How many Frisbees did they buy in all? NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Grace gave 32 buttons to Jimmy and 27 buttons to James. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Teacher Models | How many buttons did Grace give away in all? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Howard read 14 pages on Saturday and 50 pages on Sunday. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Teacher & Student Collaborate | How many pages did Howard read total? NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Mosha earned 42 tickets in August and 51 tickets in September. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Student Completes Independently | How many tickets did she earn altogether? NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|---|---|--|---|
| I DO | Step One: Read the problem Carl made 58 bird houses in January and 35 bird houses in February. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 33 Teacher Models | How many more bird houses did he make in January than February? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Greg received \$45 for his birthday. He spent \$15 on a new video game. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Teacher & Student Collaborate | How much money did Greg have left? NOW Step Two: Think about and talk | | |
| | about the problem Step One: Read the problem A flock of 68 birds were resting in a tree. After an hour, 53 birds flew away. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Student Completes Independently | How many birds were left in the tree? NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Mrs. Smith has 14 students in her class but she only has 11 desks. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher Models | How many more students than desks are there? NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem There are 24 seats on the roller coaster ride. There are 29 people in line to ride | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher & Student Collaborate | the roller coaster. How many people will not be able to ride the roller coaster? NOW Step Two: Think about and talk about the problem | | |
| you do | Step One: Read the problem The doll costs \$60. Rachel has \$40. How much more money does Rachel need to | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Student Completes Independently | NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|--|---|--|--|
| Card 35 Teacher Models I DO | Step One: Read the problem Cube = 6 flat surfaces Cylinder = 2 flat surfaces Rectangular Prism = 6 flat surfaces How many flat surfaces do a cylinder and 2 cubes have? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher & Student Collaborate | about the problem Step One: Read the problem Cube = 6 flat surfaces Cylinder = 2 flat surfaces Rectangular Prism = 6 flat surfaces How many flat surfaces do a rectangular prism and 2 cubes have? NOW Step Two: Think about and talk about the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Student Completes Independently | about the problem Step One: Read the problem Cube = 6 flat surfaces Cylinder = 2 flat surfaces Rectangular Prism = 6 flat surfaces How many flat surfaces do 1 cube, 1 cylinder, and 1 rectangular prism have? NOW Step Two: Think about and talk about the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Count by sevens. Start with | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher Models | the number 286. What will the next four numbers be? <u>286</u> ,,,, NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One: Read the problem Count by fours. Start with the number 695. What will | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher & Student Collaborate | <pre>the next four numbers be? 695,,,, </pre> NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Count by fives. Start with the number 512. What will | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Student Completes Independently | NOW Step Two: Think about and talk about the problem | | |

| | Student Name: | | Date: |
|------------------------------------|---|--|--|
| Use | | tra or replacement cards for the 'I D | O - WE DO - YOU DO' intervention. |
| I DO | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card Teacher Models | | | |
| | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Teacher & Student Collaborate | | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Student Completes Independently | | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |

I DO WE DO YOU DO

SECOND GRADE

UNIVERSAL SCREENING/BASELINE ASSESSMENT 2nd grade

Directions: Have the student complete the baseline assessment on this page before beginning the "I DO - WE DO - YOU DO" Math Problem Solving Intervention. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| Hillary saw 30 caterpillars going up a tree. Bill saw 40 caterpillars crawling on the sidewalk. | problem on the lines below: | |
| How many groups of ten caterpillars did Hillary and Bill see? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|--|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient 3 | The student understood the problem and his/her strategy works. The student's answer is correct. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. No one had to guess about the student's lines of thinking or his/her answer(s). | The student noticed something mathematical about his/her work that reminded him/her of some other work and he/she noted it in some way. | The student used a math representation to help solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging 2 | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the problem. | The student used some math language and/or math notation. The student needs help in understanding the where and why math language could have been used more effectively in his/her work. | The student tried to notice something, but it is not about the math in the problem. The student needs help in making connections to what he/she knows and understands. | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. The student needs help making representations that really show his/her thinking |
| Not Evident 1 | The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to solve the problem. | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the errors. | The student used no math language and/or math notation. The student needs help to show him/her where he/she could have used math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. The student needs help in making connections to other work and strategies. | The student did not use a math representation to help solve the problem and explain his/her work. The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #1 (given to student after completing 1 week of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|-------------------------------|---|---|
| Mr. Rodriguez has 6 bags with | · | |
| 10 pencils in each bag. He | | |
| buys 4 more pencils. | | |
| How many pencils does Mr. | | |
| Rodriguez have in all? | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|---|---|--|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient 3 | The student understood the problem and his/her strategy works. The student's answer is correct. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. No one had to guess about the student's lines of thinking or his/her | The student noticed something mathematical about his/her work that reminded him/her of some other work and he/she noted it in some way. | The student used a math representation to help solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging 2 | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. The student's strategy works for part of the problem. He/she needs help in understanding how to finish the pachlam | Some of the student's math thinking is correct. The student needs clarity to help in understanding the problem. | answer(s). The student used some math language and/or math notation. The student needs help in understanding the where and why math language could have been used more effectively in his/her work. | The student tried to notice something, but it is not about the math in the problem. The student needs help in making connections to what he/she knows and understands. | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. The student needs help making representations that really show his/her thinking |
| Not Evident 1 | the problem. The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to solve the problem. | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the errors. | The student used no math language and/or math notation. The student needs help to show him/her where he/she could have used math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. The student needs help in making connections to other work and strategies. | The student did not use a math representation to help solve the problem and explain his/her work The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #2 (given to student after completing 2 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--------------------------------|--|---|
| Barbara baked three cakes | problem on the lines below: | |
| for her children. If each cake | | |
| has 5 candles, how many | | |
| candles are there in all? | | |
| | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the | Or, the student explained a rule and how it was used to solve this | The paths of the student's thinking were clear. He/she showed | strategies & he/she used that to extend his/her answer. | another way. |
| | error was discovered and what should be done to correct the problem. | problem. All of the student's math | step-by-step how he/she arrived at the answer(s). | And/or the student showed how this problem | representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| ۷ | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

78

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #3 (given to student after completing 3 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem | Step Three: Solve the problem |
|---|--|------------------------------------|
| Billy did not build any birdhouses in June. In July he built 56 birdhouses. How many birdhouses did he build in all? | and write HOW you will solve the problem on the lines below: | using pictures, words, or numbers. |
| What number sentence can you write to solve this problem? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | P | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 2nd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #4 (given to student after completing 4 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Jonathon received money for his birthday. He was given \$17 dollars by his grandmother, \$15 from his aunt, and \$19 from his brother. | problem on the lines below: | |
| How much money did he receive in all? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #5 (given to student after completing 5 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|----------------------------|--|---|
| 69 children showed up at | problem on the lines below: | |
| the city race. 26 children | | |
| actually ran in the race. | | |
| How many children did | | |
| not run in the race? | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 2nd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #6 (given to student after completing 6 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|--|---|
| There are 86 doctors at the hospital. 34 of them | problem on the lines below: | |
| are women. How many of the doctors are men? | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|--|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem is like another problem. | All of the student's representations are labeled and correct. |
| Proficient 3 | The student understood the problem and his/her strategy works. The student's answer is correct. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. No one had to guess about the student's lines of thinking or his/her answer(s). | The student noticed something mathematical about his/her work that reminded him/her of some other work and he/she noted it in some way. | The student used a math representation to help solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging 2 | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the problem. | The student used some math language and/or math notation. The student needs help in understanding the where and why math language could have been used more effectively in his/her work. | The student tried to notice something, but it is not about the math in the problem. The student needs help in making connections to what he/she knows and understands. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. The student needs help making representations that really show his/her thinking |
| Not Evident 1 | The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to solve the problem. | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the errors. | The student used no math language and/or math notation. The student needs help to show him/her where he/she could have used math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. The student needs help in making connections to other work and | The student did not use a math representation to help solve the problem and explain his/her work. The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | strategies. Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #7 (given to student after completing 7 weeks of the intervention)

| Step One: Read the problem Elana is on her way to the store to buy juice boxes for her son's baseball team. There are a total of 9 boys on the team. If each boy receives 3 boxes of juice, how many boxes does Elana | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three : Solve the problem using pictures, words, or numbers. |
|--|--|--|
| how many boxes does Elana need to buy in all? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| | correct the problem. | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 2nd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #8 (given to student after completing 8 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Tina has a \$20 dollar bill, a \$5 dollar bill, four \$1 dollar bills, 3 quarters, and 7 dimes. How much money does she have in all? | problem on the lines below: | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | and correcting the errors. | the student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #9 (given to student after completing 9 weeks of the intervention)

| Step One: Read the problem Ramona the cat measures 12 inches long. Her | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| brother Jay Jay is 14 inches long. Her sister | | |
| Betty is longer than Ramona but shorter than Jay Jay. How long is Betty? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 2nd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #10 (given to student after completing 10 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|--|---|
| Angelica bought 6 pies for a total of \$30. How much does each pie cost? | problem on the lines below: | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #11 (given to student after completing 11 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| What is the value of the '9' in the number 694? | problem on the lines below: | |
| What is the value of the '4' in the number 694? | | |
| What is the value of the '6' in the number 694? | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she | strategies & he/she used that to extend his/her answer. | another way. All of the student's representations are |
| | what should be done to correct the problem. | All of the student's math thinking is correct. | arrived at the answer(s). | And/or the student showed how this problem is like another problem. | labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | and correcting the errors. | the student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

2ND GRADE

Math Problem Solving RTI Progress Monitoring Assessment – 2nd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #12 (given to student after completing 12 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem | Step Three: Solve the problem |
|----------------------------|-----------------------------------|------------------------------------|
| Your friend is thinking of | and write HOW you will solve the | using pictures, words, or numbers. |
| a number. It has a 0 in | problem on the lines below: | |
| the tens place, a 5 in the | | |
| hundreds place, and a 4 in | | |
| the ones place. | | |
| What number is your | | |
| friend thinking of? | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

88

I DO WE DO YOU DO

Math Problem Solving Cards – 2nd Grade

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Marty stacked his baseball cards into 5 stacks. If there are 10 cards in each stack, how many | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 1 Teacher Models | <pre>cards does he have in all? NOW Step Two: Think about and talk about the problem.</pre> | | |
| WE DO | Step One: Read the problem Brenda stacked her books into 7 stacks. If there are 10 books in each stack, how many books does | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 1 Teacher & Student Collaborate | she have in all? | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Reggie stacked his CDs into 4 stacks. If there are 10 CDs in each stack, how many CDs does he have in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 1 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|---|---|--|
| I DO | Step One: Read the problem Jennifer used tens and ones to show the number 57. How did she show the number? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Teacher Models | 7 tens and 5 ones 5 tens and 7 tens 5 tens and 7 ones 5 ones and 7 ones NOW Step Two: Think about and talk about the problem. | | |
| Q | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| VE | Lee used tens and ones to show the number 83. How did he show the number? | | |
| : Teacher & Student Collaborate | 3 tens and 8 ones 8 tens and 3 tens 8 tens and 3 ones 8 ones and 3 ones | | |
| Card 2 | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Trish used tens and ones to show the number 71. How did she show | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | the number? 1 ten and 7 tens 7 ones and 1 ten | | |
| Card 2 Student Completes Independently | 7 tens and 1 ten 7 tens and 1 one | | |
| Card 2 I | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|---|---|--|
| I DO | Step One: Read the problem Erin has 39 CDs. About how many | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Teacher Models | CDs does she have? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Ronnie eats 21 gumdrops. About how many gumdrops did he eat? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Stephanie ran 17 miles. About how many miles did she run? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Kandy stuck 4 stickers on every page of her sticker book. If her sticker book has 6 pages total, how many stickers did Kandy stick | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Teacher Models | in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Richard drew three pictures on each page of his journal. If his journal has 7 pages total, how many pictures did he draw in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem DeeDee wrote 5 words on each page of her writing notebook. If her notebook has a total of 8 pages, how many words did she write in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Ten frogs like to eat green flies. Three frogs like to eat grasshoppers. Seven frogs like to eat crickets. How many fewer frogs like to eat | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher Models | crickets than flies? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Seven children like pizza. Four children like spaghetti. Two children like hotdogs. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher & Student Collaborate | How many fewer children like hotdogs than pizza? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Six students like to jump rope. Six students like to play kick ball. Nine students like to play dodge ball. How many fewer children like | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Student Completes Independently | to play kick ball than dodge ball? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|---|---|--|
| I DO | Step One: Read the problem The ice cream man has 5 fudge bars, 4 ice cream sandwiches, 8 vanilla bars, and 2 orange push- ups. If he sells 3 fudge bars, an | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Teacher Models | ice cream sandwich, and one orange push-up, how many items will he have left? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem The pet store has 4 dogs, 3 cats, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | 2 turtles, and 3 hamsters. If they sell 2 dogs and a hamster, how many pets will they have total? | | |
| 6 Teacher & Student Collaborate | | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem The library has 3 picture books, 7 chapter books, 2 dictionaries, and 3 bibliographies. If Jenny checks out 2 chapter books and 2 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Student Completes Independently | bibliographies, how many books will the library have left? | | |
| Card 6 In | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|---|
| Card 7 Teacher Models I DO | Step One: Read the problem Rasheka didn't read any books in January. In February she read 9 books. How many books did she read altogether? What number sentence can you write to solve this problem? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| WE DO | about the problem. Step One: Read the problem Ralph didn't swim any laps on Monday. He swam 5 laps on Tuesday. How many laps did he swim altogether? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 7 Teacher & Student Collaborate | What number sentence can you write to solve this problem? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Lulu walked 5 blocks on Thursday. She didn't walk at all on Friday. How many blocks did she walk altogether? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 7 Student Completes Independently | What number sentence can you write to solve this problem? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Eight mechanics are working on cars. Three of the mechanics leave to eat lunch. How many | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 Teacher Models | mechanics are still working on cars? Write the number sentence for this problem: | | |
| Card 8 ⁻ | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Five zebras are running. Two of the zebras stop to drink water. How many zebras are still running? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Teacher & Student Collaborate | Write the number sentence for this problem: | | |
| Card 8 Teacher & Stu | NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Seven students are reading a book. Five students finish their books and leave to get a drink of water. How many students are still reading? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| ent Completes ndently | Write the number sentence for this problem: | | |
| Card 8 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem Is this true or false? Tammy has 60 pennies in her purse and 7 pennies in her piggy bank. She has a total of 67 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Is this true or false? Rick found 30 marbles in the toy box and 4 marbles under the couch. He has a total of 36 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Is this true or false? Fred was given 40 dollars from his grandmother and 4 dollars from his aunt. He has a total of 45 | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Student Completes Independently | dollars NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem John found 37 tan seashells and 12 white seashells. How many seashells did he find in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Naomi sees 13 orange butterflies and 45 yellow butterflies. How many butterflies does she see in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Chloe has 38 goldfish and 21 angelfish in her aquarium. How many fish does she have in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Edgar ate 7 crackers on Thursday. He ate 16 crackers on Friday and 14 on Saturday. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Teacher Models | How many crackers did Edgar eat in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Jillian read 5 pages of her book on Monday. She reads 13 pages on Tuesday and another 13 pages on Wednesday. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Teacher & Student Collaborate | How many pages did Jillian read in all? NOW | | |
| Card | Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Polly found 8 pennies in September. She found 12 pennies in October and 17 pennies in November. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Student Completes Independently | How many pennies did Polly find in all? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Chrissy drives 43 miles on Saturday and 31 miles on Sunday. About how many miles did she drive over the weekend? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Teacher Models | 80 70 60 50 NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Paola sells 53 cups of lemonade on Thursday and 20 cups lemonade on Saturday. About how many cups of lemonade did she sell? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Teacher & Student Collaborate | 90 80 70 60 NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Johnny read 72 pages of his book in June and 16 pages in July. About how many pages did he read? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Student Completes Independently | 20 50 70 90 NOW | | |
| Ŭ | Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Lynn drank 5 cups of blue punch and 4 cups of orange punch. How many cups of blue punch did she drink? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Charlie ate 2 red apples at school and 2 green apples at home. How many red apples did he eat in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Susan bought 3 yellow dresses and 5 purple dresses for her baby doll. How many purple dresses did she buy? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Phil bought 65 chocolate covered cherries for his mother for Mother's Day. She ate 3 of them. How many does she have left? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Samuel bought 47 dog treats for his new puppy. His puppy ate 4 treats. How many treats does he have now? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem 58 children went to the city swimming pool. 32 children jumped into the pool. How many children did not jump in the pool? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Sigmund sold 39 donuts in the morning and 19 donuts in the afternoon. How many more donuts | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher Models | did he sell in the morning than in the afternoon? NOW Step Two: Think about and talk about the problem. | | |
| Card 15 Teacher & Student Collaborate | Step One: Read the problem Suzie walked 14 dogs in the morning and 27 dogs in the afternoon. How many more dogs did she walk in the afternoon than in the morning? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| YOU DO | Step Two: Think about and talk about the problem.Step One: Read the problemSabrina watched 50 minutes of television in the morning and 72 minutes in the afternoon. How many more minutes of television | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Student Completes Independently | did Sabrina watch in the afternoon than in the morning? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|---|--|
| Card 16 Teacher Models I DO | Step One: Read the problem Mrs. Ally brought a total of 80 hamburgers and hotdogs to the picnic. If 46 of that number were hamburgers, how many hotdogs did she bring? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| WE DO | Step One: Read the problem There are 73 students at the high school. 45 of them are boys. How many of the students are girls? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem A total of 68 dogs and cats were in the school pet show. 54 of them were cats. How many pets were dogs? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Will doesn't weigh as much as Toby. Trisha weighs more than Will but less than Toby. Of the three children, who weighs the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Tina is tall but isn't as tall as Simon. Ray is shorter than Simon but is taller than Tina. Of the three children, who is the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher & Student Collaborate | <pre>shortest? Who is the tallest? NOW Step Two: Think about and talk about the problem.</pre> | | |
| YOU DO | Step One: Read the problem Amanda can run fast but she can't run as fast as Trixie. Kay can't run as fast as Trixie either but is faster than Amanda. Of the three runners, who is the fastest? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Marilyn planted 5 marigolds. Denny planted 7 begonias. Richard planted 8 tulips. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Teacher Models | How many flowers did they plant in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Melissa played checkers for 4 hours. Rebekah played chess for 5 hours. Denise played cards for 6 hours. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Teacher & Student Collaborate | For how many hours did they all play games? NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Sammy ate 6 carrots. Carlos ate 3 stalks of celery. Ricardo ate 4 cucumbers. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Student Completes Independently | How many vegetables did they eat altogether? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|---|--|
| I DO | Step One: Read the problem Sharon collected cans of food for 7 families who lost their homes because of a tornado. If she | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Teacher Models | wants to give each family 5 cans, how many cans will she give out in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Kiki loves to make necklaces. She has 4 sisters. If she wants to make 3 necklaces for each sister, how many necklaces will she have | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Teacher & Student Collaborate | to make in all? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Allen is going to the store to buy bottled water for the basketball team. There are a total of 7 boys on the team. If each boy receives | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Student Completes Independently | 3 bottles of water, how many bottles does Allen need to buy in all? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|---|
| I DO | Step One: Read the problem Seth studied for 25 minutes. Helen studied for 35 minutes. Roger studied for 13 minutes. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher Models | How many minutes did Seth, Helen, and Roger study in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One : Read the problem Kathy ran for 37 minutes. Tracy ran for 46 minutes. Greg ran for 12 minutes. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher & Student Collaborate | How many minutes did Kathy, Tracy, and Greg run in all? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Mr. Cramer drove for 58 minutes. Mr. Rogers drove for 41 minutes. Mrs. Pauls drove for 15 minutes. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Student Completes Independently | How many minutes did Mr. Cramer, Mr. Rogers, and Mrs. Pauls drive in all? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| I DO | Hilda cut out 54 circles. She threw 3 of the circles away in the classroom and 4 more in the bathroom. How many circles did | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 21 Teacher Models | Hilda have left? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Dorothy bought 35 tickets at the fair. She lost 4 tickets in the bathroom and 2 more tickets while riding the roller coaster. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 21 Teacher & Student Collaborate | MOW Step Two: Think about and talk about the problem. | | |
| Card 21 Student Completes YOU DO Independently | Step One: Read the problem Kira found 67 seashells at the beach. She dropped 5 seashells next to the coconut tree and 4 more seashells next to the palm tree. How many seashells does Kira have left? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Ū | Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Jake has 28 magazines. He gives Nancy 23 of the magazines. Edward has 42 magazines. He gives Vinnie 37 of his magazines. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher Models | How many magazines does Jake have left? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Freddy has 45 nickels. He gives Susan 23 nickels. Edward gives Vicky 21 nickels. How many nickels does Freddy have left? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Mr. Green has 39 stamps. He gives Mr. Red 25 of his stamps. Mr. Brown has 58 stamps. He gives Mr. White 16 stamps. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Student Completes Independently | How many stamps does Mr. Brown have left? | | |
| Card 2 | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Marquavious has seven dimes. He wants to buy a biscuit for 14 cents and a donut for 25 cents. Does Marquavious have enough money to | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher Models | buy both the biscuit and the donut? If your answer is yes, how much change will he get back? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Jacob has two quarters. He wants to buy a pencil for 15 cents and an eraser for 18 cents. Does Jacob have enough money to buy the two | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher & Student Collaborate | items? If your answer is yes, how much change will he get back? NOW | | |
| ଁ | Step Two: Think about and talk about the problem. | | Stop Four Colucities making |
| YOU DO | Step One: Read the problem Bertha has two quarters and two dimes. She wants to buy a soda for 40 cents and a cookie for 20 cents. Does Bentha have enough | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Student Completes Independently | cents. Does Bertha have enough money to buy the two items? If your answer is yes, how much change will she get back? | | |
| | Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Ti has a \$10 dollar bill, a \$5 dollar bill, three \$1 dollar bills, 2 quarters, and 2 dimes. How much | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Teacher Models | MOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Maya has a \$5 dollar bill, two \$1 dollar bills, a quarter, and a dime. How much money does she have in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Elaine has a \$10 dollar bill, three \$1 dollar bills, two quarters, and three dimes. How much money | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Student Completes Independently | does she have in all? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Nicole received \$25 for her birthday. She bought a sweater for \$10 and a pair of sandals for | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher Models | \$7.50. How much change did she receive after buying the two items? NOW Step Two: Think about and talk about the problem. | | |
| 25 Teacher & Student Collaborate | Step One: Read the problem Nia's mother gave her \$10 to spend at the book fair. Nia bought a book for \$3 and another book for \$2.50. How much change did she receive after buying the two books? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| YOU DO | NOW Step Two: Think about and talk about the problem. Step One: Read the problem Lucy has \$15 to spend at the clothing store. She buys a shirt | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Student Completes Independently | for \$6 and a pair of pants for \$6.50. How much change did she receive after buying the two items? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Thomas eats dinner every evening at 6:00 p.m. Tonight he finished eating in 25 minutes. What time was it when he finished eating? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Scott wakes up every morning at 7:30 a.m. It takes him 30 minutes to get ready for school. What time does Scott leave to go to | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher & Student Collaborate | school every morning? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem DiDi writes for 20 minutes every day in her journal. If she started writing at 10:05 this morning, what time did she finish writing? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Sandy the dog weighs 18 pounds. Buffy the cat weighs 16 pounds. Lionel the duck weighs more than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher Models | Buffy but less than Sandy. How much does Lionel weigh? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Rosalia has a shoestring that is 15 inches long. Ramon has a shoestring that is 13 inches long. Oscar has a shoestring that is | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| ard 27 Teacher & Student Collaborate | longer than Ramon's but shorter than Rosalia's. How long is Oscar's shoestring? | | |
| Card 2 | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Kristen can run for 24 minutes. Lionel can run for 26 minutes. Randy can run longer than Kristen but shorter than Lionel. How long | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Student Completes Independently | can Randy run? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Mrs. Davis is setting the table. About how long is her table? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher Models | 80 feet 8 feet 8 miles 8 inches NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Paul has a toy box in his bedroom. About how long is his toy box? 30 feet | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher & Student Collaborate | 3 feet 3 miles 3 inches NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Jessie sees a picture on the wall at the museum. About how tall is the picture? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Student Completes Independently | 2 feet 2 inches 2 miles 20 feet NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem The temperature inside is 23 degrees warmer than the temperature outside. If the temperature outside is 47 degrees, what is the temperature | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem The temperature outside is 43 degrees colder than the temperature inside. If the temperature inside is 68 degrees, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Teacher & Student Collaborate | what is the temperature outside? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem The temperature in Georgia is 53 degrees warmer than in Colorado. If the temperature is 95 degrees in Georgia, what is the temperature in Colorado? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Angie bought 5 cakes for a total of \$20. How much does each cake cost? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Joe bought a pizza for \$8. If the pizza has 4 slices, how much does one slice cost? | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Annie bought an apple pie for \$12. If the pie has 6 slices, how much does each slice cost? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|---|--|
| I DO | Step One: Read the problem There are 100 marbles in a bag. If Maureen buys 4 bags, how many marbles will she have in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem There are 100 cards in a box. If Randy buys 7 boxes, how many cards will he have in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem There are 100 lemon drops in a bag. If Trudy buys 8 bags, how many lemon drops will she have in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|---|
| Card 32 Teacher Models I DO | Step One: Read the problem What is the value of the '4' in the number 345? What is the value of the '3' in the number 345? What is the value of the '5' in the number 345? What is the value of the '5' in the number 345? What is the value of the '5' in the number 345? Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Teacher & Student Collaborate | Step One: Read the problem What is the value of the '9' in the number 793? What is the value of the '7' in the number 793? What is the value of the '3' in the number 793? What is the value of the '3' in the number 793? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 32 Student Completes YOU DO Independently | Step One: Read the problem What is the value of the '8' in the number 680? What is the value of the '0' in the number 680? What is the value of the '6' in the number 680? What is the value of the '6' in the number 680? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| St | udent Name: | | Date: |
|---|--|--|--|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| I DO | Which number sentence equals to a number greater than 421? | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 33 Teacher Models | 35 + 125 = 247 + 85 = 76 + 401 = 480 - 400 = NOW Step Two: Think about and talk | | |
| | about the problem. | | |
| WE DO | Step One: Read the problem Which number sentence equals to a number greater than 143? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 33 Teacher & Student Collaborate | 75 + 27 = 132 + 4 = 67 + 97 = 456 - 400 = | | |
| Card 3. | NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Which number sentence equals to a number greater than 362? 35 + 125 = | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Student Completes Independently | 247 + 85 = 76 + 401 = 480 - 400 = NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | Date: | |
|---|---|--|--|
| I DO | Step One: Read the problem Count by threes. Start with the number 621. What will the next four numbers be? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher Models | 621,, _,, _ | | |
| WE DO | Step One: Read the problem Count by fives. Start with the number 734. What will the next four numbers be? 734,,,,, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Count by fours. Start with the number 237. What will the next four numbers be? 237,,,,, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Your father is thinking of a number. It has a 4 in the tens place, a 8 in the hundreds place, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher Models | and a 0 in the ones place. What number is your father thinking of? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Your teacher is thinking of a number. It has a 6 in the tens place, a 4 in the hundreds place, and a 2 in the ones place. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher & Student Collaborate | What number is your teacher thinking of? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Your best friend is thinking of a number. It has a 0 in the tens place, a 9 in the hundreds place, and a 7 in the ones place. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Student Completes Independently | What number is your best friend thinking of? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Harry watched 576 minutes of T.V. in July and 428 minutes in August. How many minutes of T.V. did he watch in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Kay flew 268 miles in March and 809 miles in April. How many miles did she travel in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Fernanda read 621 pages in February and 419 pages in March. How many pages did she read in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

I DO WE DO YOU DO

THIRD GRADE

Date:

UNIVERSAL SCREENING/BASELINE ASSESSMENT 3rd grade

Directions: Have the student complete the baseline assessment on this page before beginning the "I DO - WE DO - YOU DO" Math Problem Solving Intervention. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

| Step One: Read the problem (base-ten blocks may be used for this problem) | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| Jason used base-ten blocks to model the number 736. If he takes away 1 tens | problem on the lines below: | |
| block, what number will he have? | | |
| <i>(Start again with the number 736)</i> If Jason takes away 1 hundreds block, what number will he have? | | |
| <i>(Start again with the number 736)</i> If Jaime takes away 1 one block, what number will she have? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | All of the student's representations are labeled and correct. |
| | correct the problem. | thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

128

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #1 (given to student after completing 1 week of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| What is the least possible number you can write using the digits | problem on the lines below: | |
| 8, 4, 9, 2? (Use each digit only once) | | |
| What is the greatest possible | | |
| number you can write using the digits 8, 4, 9, 2? <i>(Use each digit only</i> | | |
| once) | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | • | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 3rd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #2 (given to student after completing 2 weeks of the intervention)

| Step One: Read the problem At the city warehouse a total of 602 employees ride the train to work. Another 194 employees drive a car to work. Additionally, a total of 86 employees ride the city bus to work. How many employees work at the city warehouse? What is that number rounded to the nearest hundred? | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|--|--|---|
| What is that number rounded to the nearest ten? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | arrived ar me answer (3). | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

130

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #3 (given to student after completing 3 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| Chase and Josh entered a hotdog eating contest. Chase ate a total of 17 hotdogs. Josh ate 5 hotdogs fewer than Chase. | · | |
| How many hotdogs did they eat in all? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she | strategies & he/she used that to extend his/her answer. | another way. All of the student's representations are |
| | what should be done to correct the problem. | All of the student's math thinking is correct. | arrived at the answer(s). | And/or the student showed how this problem is like another problem. | labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Date: _

Math Problem Solving RTI Progress Monitoring Assessment – 3rd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #4 (given to student after completing 4 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem | Step Three: Solve the problem |
|---|--|------------------------------------|
| How many half dollars are there in 7 dollars? | and write HOW you will solve the problem on the lines below: | using pictures, words, or numbers. |
| How many quarters are there in 7 dollars? | | |
| How many dimes are there in 7 dollars? | | |
| How many nickels are there in 7 dollars? | | |
| How many pennies are there in 7 dollars? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. | All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

300

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #5 (given to student after completing 5 weeks of the intervention)

| | Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|--|---|---|
| Quan has 2 strawberry patches with 5 rows of 7 strawberry plants each. How many strawberry plants does he have in all? | 5 rows of 7 strawberry plants each. How many strawberry plants does | | using pierures, words, or numbers. |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 3rd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #6 (given to student after completing 6 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|------------------------------------|---|---|
| There are 54 pine trees in 6 equal | | |
| rows. How many pine trees are in | | |
| each row? | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

300

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #7 (given to student after completing 7 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|--|---|
| Sung Li bought breakfast for herself and her daughter. She paid with a \$20 bill. Her change was \$4.87. How much did the breakfast cost? | problem on the lines below: | 51 |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 3rd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #8 (given to student after completing 8 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| Six men went to golf camp the first week of April. There were seven men at camp the second week and two times that many in the third week. How many men went to golf camp altogether? | problem on the lines below: | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #9 (given to student after completing 9 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Gretel wrote this number pattern: 741, 753, 765, 777, 789, 801 | problem on the lines below: | |
| What rule did she use? | | |
| What would be the next two numbers in the pattern? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 3rd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #10 (given to student after completing 10 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem | Step Three: Solve the problem |
|---|---|------------------------------------|
| Mandy divided a piece of yarn into 15 equal parts. She used 7 parts to make ornaments and 4 parts to make bracelets. | and write HOW you will solve the problem on the lines below: | using pictures, words, or numbers. |
| What fraction of the yarn did she use? | | |
| What fraction of the yarn did she not use? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation | is like another problem. The student noticed something mathematical | The student used a math representation to help |
| 3 | works. The student's answer is correct. | - | throughout his/her work. No one had to guess about the student's lines of thinking or his/her answer(s). | about his/her work that reminded him/her of some other work and he/she noted it in some way. | solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| ۷ | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

-

138

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #11 (given to student after completing 11 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Ingrid finished watching T.V. at | problem on the lines below: | |
| 5:30 p.m. She watched T.V. for 30 | | |
| minutes. She ate dinner afterwards. Ingrid came home from soccer | | |
| practice an hour before she started | | |
| watching T.V. What time did she get | | |
| home from soccer practice? | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 3rd grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #12 (given to student after completing 12 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|------------------------------------|---|---|
| What number is 1 less than 34,012? | problem on the lines below: | |
| What number is 10 more than | | |
| 34,012? | | |
| What number is 100 less than | | |
| 34,012? | | |
| What number is 1000 more than | | |
| 34,012? | | |
| What number is 10,000 less than | | |
| 34,012? | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she | strategies & he/she used that to extend his/her answer. | another way. All of the student's representations are |
| | what should be done to correct the problem. | All of the student's math thinking is correct. | arrived at the answer(s). | And/or the student showed how this problem is like another problem. | labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| ۷ | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

I DO WE DO YOU DO

Math Problem Solving Cards – 3rd Grade

| Step One: Read the problem Mr. Cohen built 56 birdhouses in two weeks. If he built 27 the second week, how many did he | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
|---|--|--|
| build the first week? | | |
| NOW Step Two: Think about and talk about the problem. | | |
| Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| years. If he read 181 books the first year, how many did he read | | |
| the second year? | | |
| NOW Step Two: Think about and talk about the problem. | | |
| Step One: Read the problem Cassandra ran 72 miles in two months. If she ran 30 miles the second month, how many miles did she run the first month? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| NOW Step Two: Think about and talk | | |
| | Step Two: Think about and talk about the problem. Step One: Read the problem Howard read 256 books in two years. If he read 181 books the first year, how many did he read the second year? NOW Step Two: Think about and talk about the problem. Step One: Read the problem Cassandra ran 72 miles in two months. If she ran 30 miles the second month, how many miles did she run the first month? | Step Two: Think about and talk about the problem. |

| | Student Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem (base-ten blocks must be used for these cards) Jaime used base-ten blocks to model the number 584. If she takes away 1 tens block, what number will she have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Teacher Models | (Start again with the number 584) If Jaime takes away 1 hundreds block, what number will she have? (Start again with the number 584) If Jaime takes away 1 one block, what number will she have? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Richard used base-ten blocks to model the number 714. If he takes away 1 tens block, what number will he have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Teacher & Student Collaborate | (Start again with the number 714) If Richard takes away 1 hundreds block, what number will he have? (Start again with the number 714) If Richard takes away 1 one block, what number will he have? NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Jenny used base-ten blocks to model the number 329. If she takes away 1 tens block, what number will she have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Student Completes Independently | (Start again with the number 329) If Jenny takes away 1 hundreds block, what number will she have? (Start again with the number 329) If Jenny takes away 1 one block, what number will she have? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem What is the least possible number you can write using the digits 5, 2, 7, 1? (Use each digit only once) | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Teacher Models | What is the greatest possible number you can write using the digits 5, 2, 7, 1? (Use each digit only once) NOW Step Two: Think about and talk | | |
| | about the problem. Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| we do | What is the least possible number you can write using the digits 4, 9, 8, 3? (Use each digit only once) | solve the problem on the lines below: | using pictures, words, or numbers. |
| Teacher & Student Collaborate | What is the greatest possible number you can write using the digits 4, 9, 8, 3? <i>(Use each digit only</i> <i>once)</i> | | |
| Card 3 7 C | NOW Step Two: Think about and talk about the problem. | | |
| DO | Step One: Read the problem | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| УОИ | What is the least possible number you can write using the digits 6, 3, 1, 8? <i>(Use each digit only once)</i> | | |
| Card 3 Student Completes Independently | What is the greatest possible number you can write using the digits 6, 3, 1, 8? (Use each digit only once) | | |
| | Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem (Use a place-value chart to illustrate) Write the following 4 numbers in standard form: Fifty-six thousand, two hundred | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Teacher Models | thirty-one: Fifty thousand, thirty-one: Fifty-six thousand, three hundred twelve: Fifty-three thousand, nineteen: NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Write the following 4 numbers in standard form: Ninety-two thousand, 4 hundred, eighteen: | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Teacher & Student Collaborate | Ninety thousand eight : Nine hundred fifteen: Ninety-four thousand, two hundred eighty-seven: NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Write the following 4 numbers in standard form: Forty-seven thousand, three hundred fifty-nine: | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Student Completes Independently | Forty-seven thousand, fifty-nine : Forty thousand, seven hundred: Forty thousand, seven: NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|---|--|---|
| I DO | Step One: Read the problem What two hundreds is 439 between? What two tens is 39 between? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher Models | Round the number 439 to the nearest hundred. What number do you have? Round the number 439 to the nearest ten. What number do you have? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem What two hundreds is 751 between? What two tens is 51 between? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher & Student Collaborate | Round the number 751 to the nearest hundred. What number do you have? Round the number 751 to the nearest ten. What number do you have? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem What two hundreds is 389 between? What two tens is 89 between? | Step Three : Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 5 Student Completes Independently | Round the number 389 to the nearest hundred. What number do you have? Round the number 389 to the nearest ten. What number do you have? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|---|---|--|
| I DO | Step One: Read the problem A total of 731 students ride the bus to Aaron's school. Another 245 students ride to school in a | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Teacher Models | car. Additionally, a total of 15 students walk to school. How many students attend Aaron's school? What is that number rounded to the nearest hundred? What is that number rounded to the nearest ten? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem A total of 504 chefs work in New York City. Another 627 chefs work in Dallas. A total of 130 chefs work in Miami. How many chefs work in all three cities? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Teacher & Student Collaborate | What is that number rounded to the nearest hundred? What is that number rounded to the nearest ten? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem A total of 257 butterflies were caught in April. Another 213 butterflies were caught in May. Only 67 butterflies were caught in | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Student Completes Independently | June. How many butterflies were caught during those three months? What is that number rounded to the nearest hundred? What is that number rounded to the nearest ten? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | Date: | |
|---|--|--|--|
| I DO | Step One: Read the problem Randi had collected 23 stamps by the time she was five years old. For the next four years she | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 7 Teacher Models | collected 18 stamps per year. How many stamps does Randi now have? How old is Randi now? NOW Step Two: Think about and talk about the problem. | | |
| Card 7 Teacher & Student Collaborate | Step One: Read the problem Marty could play fourteen songs on the piano by the time he was seven years old. For the next five years he learned thirteen songs per year. How many songs can Marty now play? How old is Marty now? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 7 Student Completes Independently DOU DO | about the problem. Step One: Read the problem Roxana could type 21 words per minute by the time she was fifteen. Over the next five years she increased the number of words she could type in one minute by 15 words per year. How many words per minute can Roxana type now? How old is Roxana now? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|--|---|--|--|
| Card 8 Teacher Models I DO | Step One: Read the problem Bella and Rosie went fishing for two days. Bella caught a total of 27 fish. Rosie caught 9 fish fewer than Bella. How many fish did they catch in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 1 | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Heather and Regina went to the mall to shop for shoes. Heather spent \$68. Regina spent \$27 more than Heather. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 Teacher & Student Collaborate | How much money did they both spend in all? NOW Step Two: Think about and talk | | |
| | about the problem. | | Ctop Found Coluci the problem |
| YOU DO | Step One: Read the problem Gerald and Glenn sold hotdogs at the baseball game. Gerald sold 63 hot dogs. Glen sold 12 more hotdogs then Gerald. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 8 Student Completes Independently | How many hotdogs did they sell in all? | | |
| Card | Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| Card 9 Teacher Models I DO | Step One: Read the problem Amelia charges \$7 for a haircut and \$15 to dye hair. Three customers come into her salon. Two of them only want haircuts but the third customer wants both a haircut and her hair dyed. How much money will Amelia earn in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 7 | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Steve charges \$18 for a Hawaiian shirt and \$16 for a Tie-dyed shirt. Tom wants to buy a Hawaiian shirt. Emily wants to buy a Tie-dyed | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Teacher & Student Collaborate | shirt and Helen wants to buy both a Hawaiian and a Tie-dyed shirt. How much money will Steve earn in all? NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Quavious charges \$22 for an Atlanta Braves baseball cap and \$15 for a New York Mets baseball cap. Julio is a Braves fan and wants to buy a Braves cap. Emilio | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Student Completes Independently | is a Mets fan and wants to buy a Mets cap. Shanique likes both teams and wants to buy one of each cap. How much money will Quavious earn in all? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Butch wants to collect a total of 5000 cans of food for the homeless. So far he has collected 3190 cans. How many more cans does he need to collect to meet his goal? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Angie's pre-school class wants to collect 4000 pennies to donate to an orphanage in Honduras. So far they have collect 2084 pennies. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 10 Teacher & Student Collaborate | How many more pennies do they need to collect to meet their goal? | | |
| Card 10 | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Shanta is trying to raise \$8000 for new playground equipment at her school. So far she has collected \$6501. How much more | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Student Completes Independently | money does she need to raise in order to meet her goal? | | |
| Card 1 | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|------------------------------------|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| DO | How many half dollars are there in 9 dollars? | solve the problem on the lines below: | using pictures, words, or numbers. |
| н | How many quarters are there in 9 dollars? | | |
| els | How many dimes are there in 9 dollars? | | |
| her Mod | How many nickels are there in 9 dollars? | | |
| Card 11 Teacher Models | How many pennies are there in 9 dollars? | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| | How many half dollars are there in 6 dollars? | solve the problem on the lines below: | using pictures, words, or numbers. |
| VE | How many quarters are there in 6 dollars? | | |
| ent | How many dimes are there in 6 dollars? | | |
| & Stude Ite | How many nickels are there in 6 dollars? | | |
| ard 11 Teacher & Student Collaborate | How many pennies are there in 6 dollars? | | |
| 111 | NOW | | |
| Care | Step Two: Think about and talk about the problem. | | |
| 0 | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| | How many half dollars are there in 8 dollars? | solve the problem on the lines below: | using pictures, words, or numbers. |
| VOV | How many quarters are there in 8 dollars? | | |
| tes | How many dimes are there in 8 dollars? | | |
| Card 11 Student Completes Independently | How many nickels are there in 8 dollars? | | |
| | How many pennies are there in 8 dollars? | | |
| Card 1 | NOW Step Two: Think about and talk | | |
| | about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem (a demonstration clock is needed for this card) | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Teacher Models | Wally sold 8 boxes of cookies at the concession stand. Each box contained 5 cookies. How many cookies did Wally sell in all? NOW Step Two: Think about and talk about the problem. | | |
| Teacher & Student Collaborate | Step One: Read the problem Warren has 6 stacks of postcards that he collected on summer vacation. If each stack has 4 postcards, how many does he have in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 T Co | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Rico bought 3 boxes of pencils. If each box has 10 pencils, how many did he buy in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Lynn can blow up 8 balloons in 10 minutes. Barry can blow up twice as many balloons as Lynn. Linus can | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher Models | blow up twice as many balloons as Barry. How many balloons can Barry blow up in 10 minutes? How many balloons can Linus blow up in 10 minutes? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Forrest played 2 card games in an hour. Brenda played 3 times as many card games as Forrest. Hillary played 3 times as many card games as Brenda | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher & Student Collaborate | How many card games did Brenda play in an hour? How many card games did Hillary play in an hour? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Jackson spent \$2 at the carnival. Ellie spent four times as much as Jackson. Nathan spent four times as much as Ellie. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Student Completes Independently | How much money did Ellie spend at the carnival? How much money did Nathan spend at the carnival? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Kanisha's birthday is July 14 th . Halle's birthday is 4 days before Kanisha's but 7 days after Lisa's. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Teacher Models | When is Halle's birthday? When is Lisa's birthday? NOW Step Two: Think about and talk | | |
| WE DO | about the problem. Step One: Read the problem Pedro's surgery is scheduled for March 29 th . Vanessa's surgery is scheduled 8 days before Pedro's but 12 days after Xavier's. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Teacher & Student Collaborate | What is Vanessa's surgery date? What is Xavier's surgery date? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Fabio's concert is on December 18 th . Corey's concert is 5 days before Fabio's but 2 days after Noah's. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Student Completes Independently | When is Corey's concert? When is Noah's concert? | | |
| Ŭ | Step Two: Think about and talk about the problem. | | |

| St | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Omar has 2 vegetable gardens with 4 rows of 6 tomato plants each. How many tomato plants | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher Models | does he have in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Dan has 3 bookcases with 5 shelves with 6 books on each shelf. How many books does Dan have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Mr. Carson owns 4 houses. Each house has 2 stories with 4 rooms on each floor. How many rooms are there altogether? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Three sisters want to share 15 crackers equally. How many | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher Models | <pre>crackers will each sister get? NOW Step Two: Think about and talk about the problem.</pre> | | |
| WE DO | Step One: Read the problem Five teachers need to create their class list of students. There are a | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher & Student Collaborate | total of 50 students. How many students will be in each class if they are divided equally? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Four friends want to divide a stack of baseball cards equally among themselves. If there are a total of 24 cards, how many does | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Student Completes Independently | each friend receive? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem There are 36 flowers in 3 equal rows. How many flowers are in each row? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| we do | Step One : Read the problem There are 45 students in 5 equal lines. How many students are in each line? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem There are 60 cars on the car lot in 5 rows. How many cars are in each row? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Mr. Kelly was born in 1967. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Teacher Models | How old was he in 1995? How old was he in 2000? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Cheyenne was born in 2004. How old was she in 2010? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Teacher & Student Collaborate | How old will she be in 2020? | | |
| YOU DO | about the problem. Step One: Read the problem Mrs. Alvarez was born in 1934. How old was she in 1963? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| dent Name: | | Date: |
|---|--|--|
| Step One: Read the problem Sylvester bought a package of crackers. He gave his cousin 5 crackers. He ate 18 crackers. There are 17 crackers left. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| many crackers were in the package he bought? NOW Step Two: Think about and talk about the problem. | | |
| Step One: Read the problem Miss Dobbs ordered a box of books for her classroom. She gave | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 8 books away to Mr. Tollison. She put 25 books on her classroom bookshelf. There are still 17 books left in the box. How many books were in the box she bought? | | |
| Step Two: Think about and talk about the problem. Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| Alison received a bag of peanuts from her Uncle Wayne. She gave her sister 15 peanuts and she ate 15 peanuts herself. There are still 27 peanuts left in the bag. How | solve the problem on the lines below: | using pictures, words, or numbers. |
| many peanuts were in the bag her Uncle Wayne gave her? NOW Step Two: Think about and talk | | |
| Uncle NOM Step | e Wayne gave her? | Wayne gave her? |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Use the table to answer the questions below: Our Favorite Colors Red 111111111111111111111111111111111111 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher Models | Blue ##L !#!L] Green !!!!! How many people answered the survey? | | |
| we do | Step One: Read the problem Use the table to answer the questions below: Our Favorite Pets Bird 111111111111111111111111111111111111 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher & Student Collaborate | Cat ###.[###.[##.] Dog ###.[###.[##.] How many people answered the survey? Which pet did most people like? How many more people prefer cats to birds? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Use the table to answer the questions below: Our Favorite President Lincoln \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Student Completes Independently | Washington 1111 How many people answered the survey? | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Mr. Collins bought dinner for himself and his wife. He paid with a \$20 bill. His change was \$2.29. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 21 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Lashonda took her three nieces to the movies. She paid with a \$50 bill. Her change was \$14.32. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 21 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Vera paid for her haircut with a \$10 bill. Her change was \$4.15. How much was her haircut? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 21 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Hector is 6 feet tall. Sigmund is | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher Models | 76 inches tall. Who is the tallest? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Wanda hopped 4 feet 4 inches. Shirley hopped 1 yard and 8 inches. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher & Student Collaborate | Whose hop was the longest? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Donavan drew a line that measured 4 feet 2 inches. Craig drew a line that measured 1 yard 11 inches. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Student Completes Independently | Whose line was the longest? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Use a place value chart to help illustrate this card. What is the value of the 7 in the number 27, 905? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher Models | What is the value of the 2 in the number 27, 905? What is the value of the 5 in the number 27, 905? What is the value of the 9 in the number 27, 905? NOW Step Two: Think about and talk about the problem. | | |
| r & Student WE DO | Step One: Read the problem What is the value of the 6 in the number 93,162? What is the value of the 2 in the number 93,162? What is the value of the 9 in the number 93,162? What is the value of the 3 in the number 93,162? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher & Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem What is the value of the 4 in the number 58,743? What is the value of the 3 in the number 58,743? What is the value of the 8 in the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Student Completes Independently | number 58,743? What is the value of the 7 in the number 58,743? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Seven students attended chess club during the first week of | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Teacher Models | school. There were eight students the second week and double that in the third. How many students attended in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Four girls went to summer camp the first week of summer. There | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| d 24 Teacher & Student Collaborate | were six girls at camp the second week and three times that many in the third week. How many girls went to summer camp altogether? | | |
| Card | Step Two: Think about and talk about the problem. Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| YOU DO | Nine boys went to the amusement park on Monday. There were three boys at the amusement park on | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 24 Student Completes Independently | Tuesday and five times that many on Wednesday. How many boys went to the amusement park in all? | | |
| Caro | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Ansley drew a rectangle that was 7 inches long and 3 inches wide. What is the perimeter of her | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher Models | rectangle? Ansley then drew a square whose sides are 4 inches each. What is the perimeter of her square? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Donald drew a rectangle that was 4 inches long and 2 inches wide. What is the perimeter of his rectangle? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher & Student Collaborate | Donald then drew a square whose sides are 5 inches each. What is the perimeter of his square? NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Andrew drew a rectangle that was 9 inches long and 5 inches wide. What is the perimeter of his rectangle? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Student Completes Independently | Andrew then drew a square whose sides are 8 inches each. What is the perimeter of his square? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Jennifer used a \$10 bill to pay for a circus ticket for \$5.35 and | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher Models | popcorn for \$2.68. How much change did Jennifer receive from the cashier? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Chi used a \$20 bill to pay for a stuffed animal that cost \$12.95 and a bracelet that cost \$4.19. How much change did she get | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher & Student Collaborate | back? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Benji used a \$10 bill to pay for a go-cart ride for \$2.67 and a hotdog for \$1.58. How much change did he get back? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Sandy wrote this number pattern: 392, 403, 414, 425, 436, 447 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher Models | What rule did she use? What would be the next two numbers in the pattern? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Lauren wrote this number pattern: 298, 348, 398, 448, 498, 548 What rule did she use? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher & Student Collaborate | What would be the next two numbers in the pattern? | | |
| YOU DO | Step One: Read the problem Chad wrote this number pattern: 873, 878, 883, 888, 893, 898 What rule did he use? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Student Completes Independently | What would be the next two numbers in the pattern? | | |

| | Student Name: | | Date: |
|---|--|---|--|
| I DO | Step One: Read the problem Stella sliced a pizza into 8 equal parts. She and her friends ate 7 slices. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher Models | What fraction was eaten? What fraction was <i>not</i> eaten? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Justine cut a board into 6 equal parts. She and her brother used 5 pieces to build a birdhouse. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher & Student Collaborate | What fraction was used? What fraction was <i>not</i> used? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Tammy cut a sub sandwich in 5 equal parts. She and her cousins ate 3 parts. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Student Completes Independently | What fraction was eaten? What fraction was <i>not</i> eaten? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| 29 Teacher Models I DO | Step One: Read the problem Mali divided a rope into 10 equal parts. She used 3 parts to tie up old magazines and 6 parts to make jump ropes. What fraction of the rope did she use? What fraction of the rope did she not use? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Marvin divided a red ribbon into 9 equal parts. He used 7 parts for bows on the Christmas tree and 2 parts to make banners. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 29 Teacher & Student Collaborate | What fraction of the ribbon did he use? What fraction of the ribbon did he not use? | | |
| Card 29 | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Bradley divided a board into 12 equal parts. He used 5 parts to make a tool box and 3 parts to make plaques. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Student Completes dependently | What fraction of the board did he use? What fraction of the board did he | | |
| Card 29 Student Comp Independently | not use? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|---|--|
| I DO | Step One: Read the problem There was $\frac{3}{4}$ of a gallon of orange juice in a pitcher before breakfast. Enrique drank $\frac{1}{4}$ gallon for breakfast. How much orange | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Teacher Models | juice was left? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem There was $\frac{5}{8}$ of a cup of grape | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| ard 30 Teacher & Student Collaborate | juice in a glass before dinner. Erica drank ² / ₈ of a cup for dinner. How much grape juice was left? | | |
| Card 30 | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem There was $^{9}/_{16}$ of a gallon of milk in a jug before lunch. Naomi drank $^{3}/_{16}$ of a gallon for lunch. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Ms. Addison bought a skirt for \$6.79, a blouse for \$8.35, pants | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Teacher Models | for \$12.50, and a candy bar for \$1.25. How much money did she spend for clothing? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Larry bought a baseball for \$2.99, a bat for \$7.68, a glove for \$13.42, and a basketball for | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Teacher & Student Collaborate | \$15.25. How much did he spend on baseball equipment? NOW Step Two: Think about and talk | | |
| - | about the problem. Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| YOU DO | Clarice bought a book bag for \$15.95, a pack of pencils for \$2.31, a dictionary for \$5.75, and a stuffed animal for \$6.15. How | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 31 Student Completes Independently | much did she spend on school supplies? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | Date: | |
|---|---|--|--|
| I DO | Step One: Read the problem A train carries 327 people on each one-way trip from Seattle to Los Angeles. How many people will | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem An airplane carries 189 people on each one-way trip from New York to Denver. How many people will travel on 5 one-way trips? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem A bus carries 52 people on each one-way trip from Atlanta to Chattanooga. How many people will travel on 8 one-way trips? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Iris finished practicing her oboe at 5:00 p.m. She practiced for 30 minutes. She watched T.V. for 30 minutes afterward. Iris came | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Teacher Models | home from school an hour before she started her oboe practice. What time did she get home from school? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Darren and Sam went to a soccer game that ended at 8:30 p.m. The game lasted 2 hours and 30 minutes. They left home 45 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 33 Teacher & Student Collaborate | minutes before the game started. What time did they leave to go to the game? | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Annie and Joanne went to see a movie. Before the movie started, they first went swimming for an hour, followed by lunch at 12:30. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Student Completes Independently | The movie started 3 hours and 30 minutes after they began swimming. What time did the movie start? | | |
| Card 3 | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | Date: | |
|---|--|--|--|
| I DO | Step One: Read the problem Louise has 23 pumpkins to sell. She divides them into 3 equal | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher Models | <pre>rows. How many pumpkins are left over? NOW Step Two: Think about and talk about the problem.</pre> | | |
| WE DO | Step One: Read the problem Mitchell collects buffalo nickels. He has a total of 39 nickels. He displays them in 4 equal rows. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Ruben has a total of 65 plastic army men toys. He lines them up into 6 equal rows. How many army men are left over? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| card 35 Teacher Models I DO | Step One: Read the problem What number is 1 less than 67,507? What number is 10 more than 67,507? What number is 100 less than 67,507? What number is 1000 more than 67, 507? What number is 10,000 less than 67, 507? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem What number is 1 more than 80,129? What number is 10 less than 80,129? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher & Student Collaborate | What number is 100 more than 80,129? What number is 1000 less than 80,129? What number is 10,000 more than 80,129? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem What number is 1 more than 45,041? What number is 10 more than 45,041? What number is 100 less than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Student Completes Independently | 45,041? What number is 1000 less than 45,041? What number is 10,000 more than 45,041? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| Card 36 Teacher Models I DO | Step One: Read the problem Frank, Ralph, Olivia, and Brent are standing in line at the water fountain. Ralph is behind Olivia but is in front of Brent. Frank is not second or third. What position is Frank in? What position is Ralph in? What position is Brent in? What position is Brent in? What position is Brent in? Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher & Student Collaborate | Step One: Read the problem Chuck, Yancey, Luke, and Paul went to the doctor to get a physical to play football. The doctor weighed each boy. Luke weighed more than Chuck. Paul weighed less than Luke but more than Chuck. Yancey weighed more than Luke. Who is the heaviest? Who is the second heaviest? Who is the third heaviest? Who weighs the least? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| YOU DO | Step One: Read the problem Four friends compare their heights. Trip is taller than Wally and Dorsey. Dorsey is taller than Nick and Wally. Wally is taller than Nick. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Student Completes Independently | Who is the tallest? Who is the second tallest? Who is the third tallest? Who is the shortest? NOW Step Two: Think about and talk about the problem. | | |

I DO WE DO YOU DO

FOURTH GRADE

Date:

UNIVERSAL SCREENING/BASELINE ASSESSMENT 4th grade

Directions: Have the student complete the baseline assessment on this page before beginning the "I DO - WE DO - YOU DO" Math Problem Solving Intervention. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

| Step One: Read the problem | Step Two: Think about the problem | Step Three: Solve the problem |
|-------------------------------------|-----------------------------------|------------------------------------|
| | and write HOW you will solve the | using pictures, words, or numbers. |
| Tonya spent thirteen dollars forty- | problem on the lines below: | |
| | problem on the lines below: | |
| five cents for a pair of running | | |
| shoes, four dollars seven cents for | | |
| two pairs of socks, and one dollar | | |
| eighty-one cents for a soda. | | |
| -9, | | |
| Llew would did Tem is an and 2 | | |
| How much did Tonya spend? | | |
| | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|--|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient 3 | The student understood the problem and his/her strategy works. The student's answer is correct. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. No one had to guess about the student's lines of thinking or his/her answer(s). | The student noticed something mathematical about his/her work that reminded him/her of some other work and he/she noted it in some way. | The student used a math representation to help solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging 2 | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the problem. | The student used some math language and/or math notation. The student needs help in understanding the where and why math language could have been used more effectively in his/her work. | The student tried to notice something, but it is not about the math in the problem. The student needs help in making connections to what he/she knows and understands. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. The student needs help making representations that really show his/her thinking |
| Not Evident 1 | The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to solve the problem. | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the errors. | The student used no math language and/or math notation. The student needs help to show him/her where he/she could have used math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. The student needs help in making connections to other work and strategies. | The student did not use a math representation to help solve the problem and explain his/her work. The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #1 (given to student after completing 1 week of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|------------------------------------|---|---|
| Ernie bought a box of candy for | | |
| \$4.02. He gave the cashier 2 half | | |
| dollars, 6 quarters, 14 dimes, 9 | | |
| nickels, and 8 pennies. | | |
| How much change will he get back? | | |
| now much change with he get back. | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment - 4th grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #2 (given to student after completing 2 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| What number is 7 tens more than 81,302? | problem on the lines below: | |
| What number is 5 hundred more | | |
| than 81,302? | | |
| What number is 6 thousand more | | |
| than 81,302? | | |
| What number is 10 thousand more | | |
| than 81,302? | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the publicm | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | the student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #3 (given to student after completing 3 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|---------------------------------------|---|---|
| Shawanda is taking a bus to visit her | · | |
| grandmother 2,501 miles away in | | |
| California. She traveled 832 miles | | |
| the first day and 870 miles the | | |
| second day. How many miles does | | |
| she still have left to travel? | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | F | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #4 (given to student after completing 4 weeks of the intervention)

| Step One : Read the problem What rule did Penny follow to get the results in the table below? | Step Two : Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|---|--|---|
| Input 5 7 9 11 Output 35 49 63 77 | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #5 (given to student after completing 5 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Loretta goes to the circus with her younger cousin. She buys 2 tickets for \$6.25 each. She also buys cotton candy for \$2.50 and a drink for \$3.50. She has \$1.50 left over. How much money did she have before going to the circus? | problem on the lines below: | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she | strategies & he/she used that to extend his/her answer. | another way. All of the student's representations are |
| | what should be done to correct the problem. | All of the student's math thinking is correct. | arrived at the answer(s). | And/or the student showed how this problem is like another problem. | labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #6 (given to student after completing 6 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|--|---|
| Brianna planted 3 separate vegetable gardens. In her first garden she has an array of 6 rows by 2 rows of peppers. In her second garden she has an array of 8 rows by 4 rows of cabbages, and in her third garden she has an array of 3 rows by 9 rows of squash. How many cabbages does Brianna have? | problem on the lines below: | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | · | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the publicm | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

186

'I DO - WE DO - YOU DO' Math Problem Solving Progress Monitoring Assessment

4[™] GRADE

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #7 (given to student after completing 7 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|--------------------------------------|--|---|
| Frederica is saving money to buy a | | |
| new kitchen table. She gets \$25 for | | |
| cleaning Mrs. Jackson's house and | | |
| \$30 to clean Mr. Paul's house. If | | |
| she cleans Mrs. Jackson's house 8 | | |
| times and Mr. Paul's house 5 times, | | |
| how much money will she have? | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 4th grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #8 (given to student after completing 8 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|------------------------------------|---|---|
| Ty brings 89 pieces of candy to | · | |
| school to share with his 23 | | |
| classmates. If each classmate gets | | |
| the same number of pieces, how | | |
| many pieces will be left over? | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #9 (given to student after completing 9 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| I am a 3-digit even number. My tens digit is two less than my hundreds digit and five less than my ones digit. The sum of my digits is 16. What number am I? | problem on the lines below: | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Math Problem Solving RTI Progress Monitoring Assessment – 4th grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #10 (given to student after completing 10 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Jasmine bought 6 ³ / ₈ gallons of blue paint and 4 ² / ₈ gallons of yellow paint. How much paint did she buy in all? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | and correcting the errors. | the student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #11 (given to student after completing 11 weeks of the intervention)

| Step One: Read the problem Wanda weighed 5 newborn puppies. The black puppy weighed 1.86 pounds, the white puppy weighed 1.68 pounds, the brown puppy weighed 1.52 pounds, the spotted puppy weighed 1.258 pounds, and the tan puppy weighed 1.528 pounds. Which puppy weighed the most? | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|---|--|---|
| Which puppy weighed the least? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | understanding the problem and choosing a strategy to solve the problem. | and correcting the errors. | the student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

4[™] GRADE

Math Problem Solving RTI Progress Monitoring Assessment – 4th grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #12 (given to student after completing 12 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|-------------------------------------|---|---|
| Crystal ran 6.4 miles and Manny ran | - | |
| twice that far. How far did the two | | |
| run altogether? | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | · · · · · · · · · · · · · · · · · · · | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

I DO WE DO YOU DO

Math Problem Solving Cards – 4th Grade

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Nancy spent nine dollars thirty- five cents for a T-shirt, three dollars sixty-seven cents for a pair of shorts, and one dollar fifty-eight cents for an ice cream. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 1 Teacher Models | How much did Nancy spend? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Joyce bought 3 books at the bookstore. The first book cost five dollars sixty cents. The | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 1 Teacher & Student Collaborate | second book cost twelve dollars ninety-four cents. The third book cost two dollars ninety-eight cents. How much did Joyce spend for books? | | |
| Card 3 | NOW Step Two: Think about and talk about the problem. | | |
| ompletes YOU DO | Step One: Read the problem Able went to the zoo. His ticket cost ten dollars fifty cents. He also bought a T-shirt for eight dollars ten cents and a drink for one dollar two cents. How much did Able spend? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 1 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| Card 2 Teacher Models I DO | Step One: Read the problem Tina's uncle is thinking of a number. The number has 3 digits and has a sum of 14. One of the digits is greater than 8 but the other 2 digits are less than 5. The tens digit is less than 3 but more than 1. The ones digit is one more than the tens digit. What number is Tina's uncle thinking of? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Teacher & Student Collaborate | About the problem. Step One: Read the problem The school principal is thinking of a number. The number has 3 digits and has a sum of 14. One of the digits is less than 5 but greater than two. The digit in the ones place is less than 9 but greater than six. The tens digit is less than the hundreds digit. It is also less than the ones digit. The ones digit is the largest of all of the digits. What number is the principal thinking of? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Student Completes Independently | Step One: Read the problem Rachel's mom is thinking of a number. The number has 3 digits and has a sum of 11. The digit in the hundreds place is less than 3. The digit in the tens place is greater than 7 but less than 9. The digit in the hundreds place is one less than the digit in the ones place. What number is Rachel's mom thinking of? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| St | udent Name: | | Date: |
|--|---|--|--|
| Card 3 Teacher Models I DO | Step One: Read the problem Egbert bought a CD for \$5.38. He gave the cashier 3 half dollars, 15 quarters, 7 dimes, 2 nickels, and 6 pennies. How much change will he get back? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | Step Two: Think about and talkabout the problem.Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| student WE DO | Hassan bought a burger for \$2.74. He gave the cashier 7 quarters, 9 dimes, 1 nickel, and 14 pennies. How much change will he get back? | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 3 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Lucy bought a movie ticket for \$6.15. She gave the cashier 5 half dollars, 10 quarters, 8 dimes, 17 nickels, and 20 pennies. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Student Completes Independently | How much change will she get back? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|--|---|--|
| I DO | Step One: Read the problemWrite the following numbers in order from least to greatest.854,901;845,091;854,910;845,190 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| DO | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| WE | Write the following numbers in order from least to greatest. | | |
| + | 392,512; 329,521; 392,215; 329,152 | | |
| Card 4 Teacher & Student Collaborate | NOW | | |
| Ŭ | Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| NOL | Write the following numbers in order from least to greatest. | | |
| Completes :ntly | 786,019; 768,910; 768,109; 786,091 | | |
| Card 4 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem On Monday 941 people went to the amusement park. On Tuesday 692 people went and on Wednesday 712 people went. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher Models | <u>About</u> how many people went to the amusement park those three days? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem In July, 758 people went to the aquarium. Another 992 people went in August and 605 people went in September. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher & Student Collaborate | <u>About</u> how many people went to the aquarium during those three months? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem During the first week of winter a total of 470 people went ice skating. Another 389 people went the second week and 531 people went the third week. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Student Completes Independently | <u>About</u> how many people went ice skating during those three weeks? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem What number is 6 tens more than 76,389? What number is 3 hundred more | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Teacher Models | than 76,389? What number is 2 thousand more than 76,389? What number is 20 thousand more than 76,389? NOW Step Two: Think about and talk about the problem. | | |
| 2 | Step One: Read the problem | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| WE | What number is 3 tens more than 29,018? What number is 9 hundred more | | |
| Teacher & Student Collaborate | than 29,018? What number is 1 thousand more than 29,018? What number is 40 thousand more than 29,018? | | |
| Card 6 | NOW Step Two: Think about and talk about the problem. | | |
| 20 | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| VOV | What number is 5 tens more than 51,630? What number is 2 hundred more | | |
| Card 6 Student Completes Independently | than 51,630? What number is 8 thousand more than 51,630? What number is 30 thousand more than 51,630? | | |
| Card 6 S [†] Indé | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| Card 7 Teacher Models I DO | Step One: Read the problem Michelle went shopping and bought a swimsuit for \$9.87, a pair of shorts for \$5.23, and sandals for \$12.75. She gave the cashier a \$50 bill. How much change did she get back? NOW Step Two: Think about and talk about the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 7 Teacher & Student Collaborate | about the problem. Step One: Read the problem Conner went to the baseball game with his dad. His dad bought him a hotdog for \$2.69, fries for \$1.03, and a drink for \$1.79. His dad paid for the food with a \$20 bill. How much change did he get back? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 7 Student Completes Independently | Step One: Read the problem Nathan went to the miniature golf course and paid \$4.50 for a game. He also bought a T-shirt for \$7.92 and a mug for \$6.24. He paid for everything with a \$20 bill. How much change did he get back? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

200

| | Student Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem Hilda earns \$6 an hour at the local supermarket. She works 5 days a week for 8 hours each day. How much money does Hilda earn in a week? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Jake works at the merry-go-round at the mall and earns \$8 an hour. He works 6 days a week for 7 hours each day. How much money | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 Teacher & Student Collaborate | does Jake earn in a week? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Hailey has a part-time job at the movie theater. She earns \$7 an hour. She works 3 days per week for 5 hours each day. How much money does Hailey earn in a week? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 8 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| Card 9 Teacher Models I DO | Step One: Read the problem The Golson family is driving a total of 1,548 miles on vacation. The first day they drive 461 miles, and the second day they drive 498 miles. How many miles do they have left to drive? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Teacher & Student Collaborate | Step One: Read the problem Kevin is learning to fly an airplane. He has to fly a total of 3,602 miles to get his license. The first week he flew 961 miles and the second week he flew 759 miles. How many miles does he still have left to fly? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Student Completes Independently | about the problem. Step One: Read the problem Porsha is traveling 2,784 miles via train. The first day she traveled 814 miles and the second day she traveled 701 miles. How many miles does she still have to travel? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|---|---|--|
| I DO | Step One: Read the problem What is the standard form for six million, four hundred seven thousand, two hundred eighty one? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem What is the standard form for three million, nine hundred four thousand, one hundred twelve? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem What is the standard form for one million, five hundred four thousand, eight hundred sixty two? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent N | ame: | | Date: | | | |
|---|--|--------|-------|--------------------|-----------------|--|--|
| I DO | Step On What ru the resu | le did | Harry | follow | to get | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Teacher Models | Input 6 7 8 9 Output 30 35 40 45 NOW Step Two: Think about and talk about the problem. | | | | | | |
| we do | Step One: Read the problem What rule did Ramona follow to get the results in the table below? | | | | | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Teacher & Student Collaborate | Input 8 10 12 14 Output 16 20 24 28 NOW Step Two: Think about and talk about the problem. | | | | 28 talk | | |
| YOU DO | Step One : Read the problem What rule did Bella follow to get the results in the table below? | | | | | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Student Completes Independently | Input Output NOW Step Tw about th | | | 6 24 out and | 8 32 talk | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Use rounding to estimate the product of 631 x 5. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Teacher Models | Use rounding to estimate the product of 897 × 3 Use rounding to estimate the product of 547 × 4 NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One : Read the problem Use rounding to estimate the product of 701 x 2. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Teacher & Student Collaborate | Use rounding to estimate the product of 623 × 6 Use rounding to estimate the product of 912 × 3 NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Use rounding to estimate the product of 482 x 7 Use rounding to estimate the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Student Completes Independently | product of 382 x 8 Use rounding to estimate the product of 296 x 6 | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Selena wants to run 30 miles. She plans to run the same number of miles each day for 5 days. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Sean wants to ride his bike 60 miles. He plans to ride the same number of miles each day for 6 days. How many miles should he | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Dan wants to swim 21 miles. He plans to swim the same number of miles each day for 7 days. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Student Completes Independently | Many miles should he swim each day? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| I DO | Raymond built a triangular brick wall in front of his house. The bottom row had 30 bricks. The second row had 25 bricks, and the third row had 20 | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 14 Teacher Models | bricks. How many bricks has he used so far? Using Raymond's pattern, how many bricks will be on the fourth row? After adding the fourth row, how many bricks will he have used total? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem JuJu used wooden blocks to make a small wall for her dog to jump over. The bottom row had 18 blocks. The second row had 15 blocks, and the third row had 12 blocks. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Teacher & Student Collaborate | How many blocks has she used so far? Using JuJu's pattern, how many blocks will be on the fourth row? After adding the fourth row, how many blocks will she have used total? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Opal used lego blocks to make a small wall for her doll to sit on. The bottom row had 20 blocks. The second row had 18 blocks, and the third row had 16 blocks. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Student Completes Independently | How many blocks has she used so far? Using Opal's pattern, how many blocks will be on the fourth row? After adding the fourth row, how many blocks will she have used total? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| Card 15 Teacher Models I DO | Step One: Read the problem Leroy goes to the zoo with his little brother. He buys 2 tickets for \$5.50 each. He also buys a bag of peanuts for \$3.75 and a drink for \$1.75. He has \$3.50 left over. How much money did he have before going to the zoo? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher & Student Collaborate | Step One: Read the problem Betty Sue goes to the grocery store. She buys 2 gallons of milk for \$3.25 each. She also buys a pint of ice cream for \$2.75 and chocolate syrup for \$3.50. She has \$7.25 left over. How much money did she have before going to the store? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Student Completes Independently YOU DO | Step One: Read the problem Yani goes to the jazz concert with his daughter. He buys 2 tickets for \$7.75 each. He also buys a bag of lemon drops for \$1.50 and a drink for \$1.50. He has \$1.50 left over. How much money did he have before going to the concert? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Mr. Armistead placed some tiles on the floor in an array that is 6 tiles long by 4 tiles wide. He has 8 tiles left over. How many tiles | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher Models | does Mr. Armistead have in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Georgette cross stitched an array of 8 squares long by 3 squares wide. She also made 4 other stitches elsewhere on the canvas. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher & Student Collaborate | NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Grandma Dorothy made a quilt out of cloth squares. The quilt was an array of 9 squares by 6 squares. She had 7 squares left over. How means cloth squares did Coording | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Student Completes Independently | many cloth squares did Grandma Dorothy have in all? NOW Step Two: Think about and talk about the problem. | | |

| Q | Jdent Name: Step One: Read the problem | Step Three: Write HOW you will | |
|--------------------------------------|--|---|--|
| 2 | • | | Step Four: Solve the problem |
| | Trisha planted 3 separate flower gardens. In her first garden she has an array of 5 rows by 4 rows | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 17 Teacher Models | of begonias. In her second garden she has an array of 6 rows by 3 rows of tulips and in her third garden she has an array of 7 rows by 2 rows of daisies. How many tulips does Trisha have? NOW Step Two: Think about and talk about the problem. | | |
| Q | Step One: Read the problem Ignacio has 3 boxes of balls. He laid the contents of each box in arrays on the grass. The first box had an array of 8 baseballs by 6 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 17 Teacher & Stud Collaborate | baseballs. The second box had an array of 5 footballs by 3 footballs, and the last box had an array of 9 golf balls by 10 golf balls. How many golf balls does Ignacio have? NOW Step Two: Think about and talk | | |
| 17 Student Complete Independently | about the problem. Step One: Read the problem Sergio has 3 boxes of tools. He laid the contents of each box in arrays in the garage. The first box had an array of 4 hammers by 2 hammers. The second box had an array of 6 screwdrivers by 3 screwdrivers, and the last box had an array of 6 wrenches by 2 wrenches. How many Hammers does Sergio have? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|--|--|---|
| Card 18 Teacher Models I DO | Step One: Read the problem The grocery store receives 35 boxes of lemons once a week. Each box holds 24 lemons. How many lemons does the grocery store receive each week? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 18 | NOW Step Two: Think about and talk about the problem | | |
| WE DO | Step One : Read the problem The movie theater receives 17 boxes of tickets each week. Each box holds 42 tickets. How many tickets does the movie theater | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Teacher & Student Collaborate | receive in all? NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Kenny ordered 36 stacks of paper plates for the school barbeque. Each stack contains 12 plates. How | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Student Completes Independently | many plates will Kenny receive when the order arrives? NOW Step Two: Think about and talk about the problem | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| Card 19 Teacher Models I DO | Step One: Read the problem Drake sells buckets of cookie dough for \$5.95 each. He has sold 87 buckets over the past month. How much money has Drake earned? NOW Step Two: Think about and talk about the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Student WE DO | Step One: Read the problem Ryan sells flags for \$6.35 each. If he sold 81 flags, how much money would he earn? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem | | |
| YOU DO | Step One: Read the problem Roseanne sells bottles of lotion for \$4.25 each. If she sells 72 bottles, how much money will she earn? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Alex is saving money to buy a car. He gets \$8 to cut Mrs. Ramsey's lawn and \$10 to cut Mr. Bill's lawn. If he cuts Mrs. Ramsey's lawn 5 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher Models | times and Mr. Bill's lawn 7 times, how much money will he have earned? NOW Step Two: Think about and talk about the problem. | | |
| & Student WE DO | Step One: Read the problem Juliet cuts hair for both men and women. She charges \$7 for a men's haircut and \$9 for a women's haircut. If she cuts 8 women's and 10 men's hair, how much money will she make? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Chrissy needs money to go to London and is earning money washing cars and trucks. She charges \$5 to wash cars and \$8 to | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Student Completes Independently | wash trucks. If she washes 9 cars and 5 trucks, how much money will she make? NOW Step Two: Think about and talk | | |
| S | Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| I DO | Micky has a \$50 bill to spend for a graduation party for his sister. He buys 24 balloons for \$0.89 each, a pack of paper plates for | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 21 Teacher Models | \$2.55, a stack of plastic cups for \$3.62, and 25 cupcakes for \$0.75 each. How much will all of the items cost Micky? Does Micky have enough money? NOW Step Two: Think about and talk about the problem. | | Step Four: Solve the problem |
| WE DO | Step One: Read the problem Carl's mom sends him to the store with a \$20 bill to buy items for his brother's birthday party. She tells him to buy 9 balloons for \$0.68 each, plates for \$1.55, cups for \$1.99, and 9 cookies for \$0.35 | Step Inree: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 21 Teacher & Student Collaborate | each. How much will all of the items cost Carl? Does Carl have enough money? NOW Step Two: Think about and talk about the problem. | | |
| Card 21 Student Completes YOU DO Independently | Step One: Read the problem Harold and Tim have \$50 to spend for their parent's 25 th wedding anniversary. They go to the store and buy a cake for \$12.13. They also buy 12 balloons for \$0.52 each, plates for \$3.79, cups for \$3.02, and 25 roses for \$0.98 each. How much will all of the items cost Harold and Tim? Do they have enough money? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|---|--|--|
| Card 22 Teacher Models I DO | Step One: Read the problem Mrs. Nelson brings 60 cupcakes to her 4 th grade class. She has a total of 23 students. If each student gets the same number of cupcakes, how many will be left over? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Mr. Nelson brings 57 apples to his six horses. If each horse gets the same number of apples, how many | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 2 Teacher & Student Collaborate | will be left over? | | |
| Card 22 | NOW Step Two: Think about and talk about the problem. | | |
| Q | Step One: Read the problem | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| YOU DO | Ty brings 45 Valentine's Day cards to his 21 classmates. If each classmate gets the same number | | |
| Card 22 Student Completes Independently | of cards, how many will be left over? | | |
| Card 2; J | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| lels I DO | Step One: Read the problem The city of Raleigh experienced a severe flood storm that dumped an average of 1 inch of rain each hour. A total of 1 foot of water fell. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher Models | How many hours did it rain? ——— NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Oklahoma City was hit with a large hail storm. An average of 2 inches of hail fell per hour. If the storm left a total of 1 foot of hail on the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher & Student Collaborate | ground, how long did the storm last? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Denver was hit with a blizzard snowstorm that left an average of 3 inches of snow each hour. If the storm left a total of 3 feet of | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Student Completes Independently | snow, how long did the storm last? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Mr. Jacobson owns a very large building in New York City. Each floor measures 24 feet high. If the total height of the building | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Teacher Models | equals 720 feet, how many floors does it have? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem John has a pine tree in his front yard that measures 216 feet. He just planted a new pine tree seedling that measures 3 feet. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| card 24 Teacher & Student Collaborate | How many seedlings would it take to equal the height of the pine tree? | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Mary stacked wooden blocks on top of each other that equaled 945 centimeters tall. How many | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Student Completes Independently | blocks were used if each block is 5 centimeters tall? NOW Step Two: Think about and talk | | |
| | about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem I am a 3-digit odd number. My tens digit is two more than my hundreds digit and one more than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher Models | my ones digit. The sum of my digits is 21. What number am I? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem I am a 3-digit odd number. My tens digit is six less than my hundreds digit and two more than | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher & Student Collaborate | my ones digit. The sum of my digits is 13. What number am I? NOW Step Two: Think about and talk about the problem. | | |
| Card 25 Student Completes YOU DO Independently | Step One: Read the problem I am a 3-digit even number. My tens digit is two more than my ones digit and four less than my hundreds digit. The sum of my digits is 6. What number am I? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 (Ind | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Barney has two boards. One board is 3 feet long. The other board is 4 times as long. Paco's board is longer than both of Barney's | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| & Student WE DO | Step One: Read the problem Reagan has two pumpkins. One pumpkin weighs 4 pounds. The other pumpkin weighs 2 times that much. Nelly has a pumpkin that weighs more than Reagan's two pumpkins put together. What inference can be made about Reagan's Pumpkin? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| YOU DO | Josiah owns two pieces of land. He owns 5 acres in Arkansas and 7 times that much in Texas. Victor owns more land than Josiah owns. What inference can be made | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 26 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Use the rectangle below to answer the following questions: | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher Models | What fraction of the rectangle above is shaded? What is the reduced form of that fraction? What fraction of the rectangle above is <i>not</i> shaded? What is the reduced form of that fraction? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Use the rectangle below to answer the following questions: What fraction of the rectangle above is shaded? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher & Student Collaborate | What is the reduced form of that fraction? What fraction of the rectangle above is <i>not</i> shaded? What is the reduced form of that fraction? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Use the rectangle below to answer the following questions: What fraction of the rectangle above is shaded? What is the reduced form of that | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Student Completes Independently | What is the reduced form of that fraction? What fraction of the rectangle above is <i>not</i> shaded? What is the reduced form of that fraction? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|---|
| I DO | Step One: Read the problem Mrs. Kennedy has $\frac{3}{4}$ cup of coffee, $\frac{1}{4}$ cup of hot chocolate, and $\frac{2}{3}$ cup | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| cher Models | of apple cider. List the ingredients in order from least to greatest amount. | | |
| Card 28 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Mr. Williams has ⁵ / ₆ gallon of oil, ² / ₃ gallon of antifreeze, and $\frac{1}{2}$ gallon of gasoline. List the ingredients in order from greatest | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 28 Teacher & Student Collaborate | to least amount. | | |
| Card 2 | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Paulette picked ${}^{3}/{}_{5}$ bucket of strawberries, $\frac{1}{4}$ bucket of blackberries, and ${}^{1}/{}_{8}$ bucket of blueberries. List the ingredients | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 28 Student Completes Independently | in order from least to greatest amount. | | |
| Card 28 Ir | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| Card 29 Teacher Models I DO | Step One: Read the problem Adam brought 3 ¹ / ₄ pizzas and Zander brought 2 ¹ / ₄ pizzas to the party. How many pizzas did they have altogether? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Teacher & Student Collaborate | about the problem. Step One: Read the problem Wendy drank 4 ¹ / ₈ cups of orange juice and Warren drank 6 ³ / ₈ cups of grape juice. How much juice did they drink in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Student Completes Independently YOU DO | about the problem. Step One: Read the problem Denise has 4 ⁵ / ₈ gallons of tea. Thomas has 5 ¹ / ₈ gallons of tea. How much tea do they have total? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Bernard bought a piece of rectangular carpet that measures 7 feet by 4 feet. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Teacher Models | What is the perimeter of the carpet? What is the area of the carpet? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Sally sewed a quilt that measures 6 feet by 5 feet. What is the perimeter of the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| ard 30 Teacher & Student Collaborate | quilt? What is the area of the quilt? | | |
| Card 30 Teac Collat | NOW Step Two: Think about and talk about the problem. | | |
| 2 | Step One: Read the problem | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| VOU | Brandy created a banner measuring 9 feet by 10 feet. | | |
| letes | What is the perimeter of the banner? | | |
| Card 30 Student Completes Independently | What is the area of the banner? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|---|--|--|
| Card 31 Teacher Models I DO | Step One: Read the problem Debbie picked 0.40 pounds of green beans. Sal picked 0.80 pounds of peas. Katie picked 3.5 pounds of peppers. How many pounds of vegetables did the three pick in all? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Teacher & Student Collaborate | Step One: Read the problem Tammy's cat Sophie had two kittens. One kitten weighs .5 pounds and the other weighs .80 pounds. If Millie weighs 9.2 pounds, how much do the three cats weigh in all? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 31 Student Completes Independently YOU DO | Step One: Read the problem Peter caught a bass that is 1.3 feet long. Dennis caught a catfish that is 1.70 feet long. Chaz caught a carp that is .9 feet long. If you laid the three fish end to end, how long would they measure? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|---|--|--|
| 0 | Step One: Read the problem | Step Three: Write HOW you will solve the problem on the lines | Step Four: Solve the problem using pictures, words, or numbers. |
| I DO | Tandy weighed her 5 hamsters. Willie weighed 0.47 pounds, Tillie weighed 0.31 pounds, Millie weighed 0.3 pounds, Billie weighed 0.4 pounds, and Lillie weighed | below: | |
| card 32 Teacher Models | 0.472 pounds. Which hamster weighed the most? Which hamster weighed the least? | | |
| Card 32 T | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Mrs. Yancey measured the length of five different books. The blue book measured 0.29 feet, the red book measured 0.92 feet, the yellow book measured 0.2 feet, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 32 Teacher & Student Collaborate | the orange book measured 0.9 feet, and the purple book measured 0.292 feet. Which book was the longest? | | |
| Card 32 Teacher & Collaborate | Which book was the shortest? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Ted weighed 5 different tools. The hammer weighed 2.35 pounds, the screwdriver weighed 1.19 pounds, the wrench weighed 1.91 pounds, the level weighed 2.53 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| t Completes ently | pounds, and the staple gun weighed 1.235 pounds. Which tool weighed the most? | | |
| Card 32 Student Completes Independently | Which tool weighed the least? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Joylene spent \$1,632.78 for a new dining room table and chairs and \$2,390.08 for a new sofa and | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Mr. Davis spent \$3,682.45 for a new tractor and \$1,350.90 for a new lawn mower. How much did he spend in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Hope spent \$1,628.99 for a new sewing machine and \$1,509.80 for a new washer and dryer. How much | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Student Completes Independently | did she spend in all? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Yolanda walked two and one tenths miles on Monday and two and seven tenths miles on Tuesday. How far did she walk altogether? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Stuart ran five and six tenths miles during week 1 and seven and two tenths miles during week 2. How far did he run in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Charlie read for three and seven tenths hours last week and five and 2 tenths hours this week. How many hours did she read in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Mr. Kingston worked 6 $\frac{1}{4}$ hours on Tuesday and 8 $\frac{3}{4}$ hours on Thursday. How much longer did he work on Thursday than on | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Ronald sang for 4 $\frac{1}{4}$ hours last weekend and 5 $\frac{1}{4}$ hours this weekend. How many more hours did he sing this weekend than last | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher & Student Collaborate | weekend? NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem Eddie drove 6 $\frac{3}{4}$ hours on Friday and 2 $\frac{1}{4}$ hours on Saturday. How many more hours did he drive on Friday than Saturday? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Willard walked 2.6 miles on Wednesday and twice that many on Friday. How many miles did he walk in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| & Student WE DO | Step One: Read the problem Nate's dog weighs 5.4 pounds and George's dog weighs twice that amount. How much do the two dogs weigh altogether? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Kris jumped 1.9 feet and Pier jumped twice that far. How far did the two jump altogether? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

I DO WE DO YOU DO

FIFTH GRADE

UNIVERSAL SCREENING/BASELINE ASSESSMENT 5th grade

Directions: Have the student complete the baseline assessment on this page before beginning the "I DO - WE DO - YOU DO" Math Problem Solving Intervention. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| What number is three hundred sixty-four thousand, nine hundred fifty? | problem on the lines below: | |
| What number is 8 tens more? | | |
| What number is 4 hundreds less? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|--|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. Or, the student | The student used a lot of specific math language and /or notation throughout his/her work. The paths of the | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math strategies & he/she used | The student used another math representation to help solve the problem and explain his/her work in another way. |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | that to extend his/her answer. And/or the student showed how this problem is like another problem. | All of the student's representations are labeled and correct. |
| Proficient 3 | The student understood the problem and his/her strategy works. The student's answer is correct. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. No one had to guess about the student's lines of thinking or his/her answer(s). | The student noticed something mathematical about his/her work that reminded him/her of some other work and he/she noted it in some way. | The student used a math representation to help solve the problem and explain his/her work, and it is labeled and correct. |
| Emerging 2 | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the problem. | The student used some math language and/or math notation. The student needs help in understanding the where and why math language could have been used more effectively in his/her work. | The student tried to notice something, but it is not about the math in the problem. The student needs help in making connections to what he/she knows and understands. | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. The student needs help making representations that really show his/her thinking |
| Not Evident 1 | The student did not understand the problem. The student needs help in understanding the problem and choosing a strategy to solve the problem. | The student's math thinking is not correct. The student needs help finding, understanding, and correcting the errors. | The student used no math language and/or math notation. The student needs help to show him/her where he/she could have used math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. The student needs help in making connections to other work and strategies. | The student did not use a math representation to help solve the problem and explain his/her work. The student needs help to understand how to do this better. |
| • | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #1 (given to student after completing 1 week of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| GiGi obtained 800 college magazines to pass out to high school seniors in her town. Each magazine has 33 pages. How many pages are there in all of the magazines put together? | problem on the lines below: | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #2 (given to student after completing 2 weeks of the intervention)

| Step One: Read the problem 8,710,375.82 | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|--|---|
| Round the number above to the nearest tenth: Round the number above to the | problem on the lines below: | |
| Round the number above to the Round the number above to the nearest ten thousand: | | |
| Round the number above to the nearest one hundred thousand: | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|--|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem is like another problem. | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

234

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #3 (given to student after completing 3 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Shawanda is laying tile in a 16-foot by 10-foot room. Each piece of tile is 1-foot square. How many pieces of tile will she need to complete the job? | problem on the lines below: | |
| If she only wanted to put tiles around the edge of the room, how many pieces of tiles would she need? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | All of the student's representations are labeled and correct. |
| | | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

5[™] GRADE

Date: _____

Math Problem Solving RTI Progress Monitoring Assessment – 5th grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #4 (given to student after completing 4 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Jen has 7 rolls of 50 dimes each. She has an additional 8 dimes and 25 nickels. How much money in dimes does Jen have? | problem on the lines below: | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | unived un me unswer (3). | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score | Score: |

236

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #5 (given to student after completing 5 weeks of the intervention)

| Step One: Read the problem | Step Two : Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|--|---|
| Cheetah Bus lines carries an average of 62 passengers on its Cleveland to Pittsburgh route. It runs 281 such trips each year. About how many passengers does it carry on those trips each year? | problem on the lines below: | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #6 (given to student after completing 6 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Porcelain tea cups are packed in | problem on the lines below: | |
| boxes. There are 5 rows with 8 cups | | |
| in a row in each layer. There are 6 | | |
| identical layers separated by | | |
| packing material. How many tea cups | | |
| are packed in one box? | | |
| How many cups would there be in 7 boxes? | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

-

238

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #7 (given to student after completing 7 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| The sporting goods store is having a sale. A baseball costs \$0.98 each. If you buy five baseballs you get the next one for half price. How much would 2 dozen baseballs cost? | problem on the lines below: | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|--|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math thinking is correct. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem is like another problem. | All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #8 (given to student after completing 8 weeks of the intervention)

| Step One: Read the problem Paul's Theater is having an audition to cast a play of 15 people. One hundred people audition for the parts. | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| What percent shows the portion of people who try out but don't get parts? | | |
| What percent shows the number of people who <i>did</i> get parts in the play? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student | another way. All of the student's representations are labeled and correct. |
| | correct the problem. | All of the student's math thinking is correct. | | showed how this problem is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| ۷ | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

0

240

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #9 (given to student after completing 9 weeks of the intervention)

| Step One: Read the problem Stephanie charges \$18 to tutor a | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| student in math for $\frac{3}{4}$ hour. Omar goes to tutoring with Stephanie on | problem on the lines below: | |
| Tuesday, Wednesday, and Thursday | | |
| but only stays for $\frac{1}{2}$ hour each time. How much does Omar pay per session? | | |
| How much does he pay per week? | | |
| If he paid for the week with a \$50 | | |
| bill, how much change would he get back? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| | · · · · · · · · · · · · · · · · · · · | thinking is correct. | | is like another problem. | |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in | The student's math thinking is not correct. The student needs help | The student used no math language and/or math notation. | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | finding, understanding, and correcting the errors. | The student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

 $5^{TH} GRADE$

Date: _

Math Problem Solving RTI Progress Monitoring Assessment – 5th grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #10 (given to student after completing 10 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|---|---|---|
| Gloria received 53 stickers from her teacher at school. Her friend | problem on the lines below: | |
| Joyce received 41 stickers and her other friend Grace received 39 stickers. | | |
| What was the average number of stickers the three received? | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and | Or, the student explained a rule and how it was used to solve this problem. | The paths of the student's thinking were clear. He/she showed step-by-step how he/she | strategies & he/she used that to extend his/her answer. | another way. All of the student's representations are |
| | what should be done to correct the problem. | All of the student's math thinking is correct. | arrived at the answer(s). | And/or the student showed how this problem is like another problem. | labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #11 (given to student after completing 11 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| The Renaissance Bank offers different interest rates for its customers. Deposits between \$1 and | problem on the lines below: | |
| \$500 earn 0.02 on each dollar and deposits between \$501 and \$1,500 earn 0.03 on each dollar. If Evan deposits \$1,431 in an account, how | | |
| much money will be in the account after one year? | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should quide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|---|---|---|--|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that | The student used a math representation to help solve the problem and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | reminded him/her of some other work and he/she noted it in some way. | explain his/her work, and it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in | The student used some math language and/or math notation. The student needs help | The student tried to notice something, but it is not about the math in the problem. | The student tried to use math representation to help solve the problem and explain his/her work but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | understanding the problem. | in understanding the where and why math language could have been used more effectively in his/her work. | The student needs help in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | understanding the problem and choosing a strategy to solve the problem. | and correcting the errors. | the student needs help to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Date: _

Math Problem Solving RTI Progress Monitoring Assessment – 5th grade

Directions: Have the student complete the data point assessment on this page to assess RTI progress. Do not help the student in any way so as to get a true picture of the student's ability relative to math problem solving.

Data Point #12 (given to student after completing 12 weeks of the intervention)

| Step One: Read the problem | Step Two: Think about the problem and write HOW you will solve the problem on the lines below: | Step Three: Solve the problem using pictures, words, or numbers. |
|--|---|---|
| Riley flew in a straight line from | | |
| City A to City B and then on to City C. City C is 2875 miles from City A. | | |
| If the distance between City A and | | |
| City B is 804 miles, how far is City C | | |
| from City B? | | |
| | | |
| | | |

Using the rubric below, assess how well the student performed in each of the five problem solving elements. DO NOT average the five scores but rather graph each element separate so as to specifically identify the area(s) of greatest concern within the problem solving process. The information derived from this data and the analysis thereof should guide instruction for future sessions.

| Level of Performance | Problem Solving | Reasoning and Proof | Communication | Connections | Representation |
|-------------------------|--|--|---|---|---|
| Exemplary | The student understands the problem. He/she used and noted a rule in the solution. He/she clearly verified that the strategy is correct. | The student showed that he/she knew more about a math idea that he/she used in his/her plan. | The student used a lot of specific math language and /or notation throughout his/her work. | The student noticed something mathematical in his/her work that reminded him/her of math big ideas, or math | The student used another math representation to help solve the problem and explain his/her work in |
| 4 | If the student found errors he/she explained how the error was discovered and what should be done to correct the problem. | Or, the student explained a rule and how it was used to solve this problem. All of the student's math | The paths of the student's thinking were clear. He/she showed step-by-step how he/she arrived at the answer(s). | strategies & he/she used that to extend his/her answer. And/or the student showed how this problem | another way. All of the student's representations are labeled and correct. |
| Proficient | The student understood the problem and his/her strategy works. | thinking is correct. All of the student's math thinking is correct. | The student used math language and/or notation throughout his/her work. | is like another problem. The student noticed something mathematical about his/her work that reminded him/her of | The student used a math representation to help solve the problem and explain his/her work, and |
| 3 | The student's answer is correct. | | No one had to guess about the student's lines of thinking or his/her answer(s). | some other work and he/she noted it in some way. | it is labeled and correct. |
| Emerging | The student only understood part of the problem. Teacher needs to help the student understand how to understand the entire problem. | Some of the student's math thinking is correct. The student needs clarity to help in understanding the | The student used some math language and/or math notation. The student needs help in understanding the | The student tried to notice something, but it is not about the math in the problem. The student needs help | The student tried to use math representation to help solve the problem and explain his/her work, but it has mistakes in it. |
| 2 | The student's strategy works for part of the problem. He/she needs help in understanding how to finish the problem. | problem. | where and why math language could have been used more effectively in his/her work. | in making connections to what he/she knows and understands. | The student needs help making representations that really show his/her thinking |
| Not Evident | The student did not understand the problem. The student needs help in understanding the problem | The student's math thinking is not correct. The student needs help finding, understanding, | The student used no math language and/or math notation. The student needs help | The student did not notice anything about the problem or the numbers in his/her work. | The student did not use a math representation to help solve the problem and explain his/her work. |
| 1 | and choosing a strategy to solve the problem. | and correcting the errors. | to show him/her where he/she could have used math language and/or math notation. | The student needs help in making connections to other work and strategies. | The student needs help to understand how to do this better. |
| | Score: | Score: | Score: | Score: | Score: |

Scor

I DO WE DO YOU DO

Math Problem Solving Cards – 5th Grade

| St | udent Name: | | Date: |
|--|---|--|---|
| I DO | Step One: Read the problem What number is four hundred sixty-three thousand, ninety-one? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 1 Teacher Models | What number is 3 tens more? What number is 5 hundreds less? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem What number is eight hundred twenty-nine thousand, five hundred thirty? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| 1 Teacher & Student Collaborate | What number is 7 tens more? What number is 9 hundreds less? | | |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem What number is seven hundred seven thousand, six hundred forty-five? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 1 Student Completes Independently | What number is 6 tens more? What number is 2 hundreds less? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Marvin delivers 800 cartons of eggs each morning. Each carton holds a dozen eggs. How many eggs does Marvin deliver | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem The theater receives 600 boxes of lemon drops each week. Each box holds 45 lemon drops. How many lemon drops are delivered | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Lupe ordered 400 packages of baseball cards. Each package contains 25 cards. How many cards did Lupe order in all? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 2 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Yuri ran 12.9 miles in three hours. How many miles per hour did he run? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Mason ran 32.6 miles over the span of 8 hours. How many miles per hour did he run? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Lila entered a walking contest. She walked 25.1 miles over the span of 10 hours. How many miles | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 3 Student Completes Independently | per hour did she walk? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|--|--|--|
| Card 4 Teacher Models I DO | Step One: Read the problem Write the following numbers in order from least to greatest. 7,236,590; 7,326,905; 7,236,059 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | Step Two: Think about and talk about the problem. | | |
| 4 Teacher & Student Collaborate WE DO | Step One: Read the problem Write the following numbers in order from least to greatest. 3,841,372; 3,841,732; 3,844,273 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Write the following numbers in order from least to greatest. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 4 Student Completes Independently | 9,058,163; 9,085,631; 9,508,316 | | |

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem 7,208,641.07 Round the number above to the nearest tenth: Round the number above to the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher Models | nearest ten: Round the number above to the nearest ten thousand: Round the number above to the nearest one hundred thousand: NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem 9,481,012.93 Round the number above to the nearest tenth: Round the number above to the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Teacher & Student Collaborate | nearest ten: Round the number above to the nearest ten thousand: Round the number above to the nearest one hundred thousand: NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem 6,538,120.49 Round the number above to the nearest tenth: Round the number above to the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 5 Student Completes Independently | nearest ten: Round the number above to the nearest ten thousand: Round the number above to the nearest one hundred thousand: NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|--|--|--|--|
| Card 6 Teacher Models I DO | Step One: Read the problem Brad has \$819,208 in the bank. He wants to buy a boat for \$7,981. If he buys the boat, about how much money will he have left? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| lent WE DO | Step Two: Think about and talk about the problem.Step One: Read the problemThe opera house made \$231,649 in ticket sales last year. Of that amount, \$6,098 was paid to the janitor to clean the auditorium. About how much money is left? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 6 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| YOU DO | The library has 638,429 books. A total of 4,210 books had to be discarded due to a flood. About how many books are left? | solve the problem on the lines below: | using pictures, words, or numbers. |
| Card 6 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| Card 7 Teacher Models I DO | Step One: Read the problem Derek had \$621. He spent \$84 at the grocery store and \$62 at the shoe store. He then received an additional \$218 from work. How much money does he have now? Write an expression to model the problem above: | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| °C | Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Mr. Mott had 216 cars on his car lot. He sold 54 cars in June and 72 cars in July. He then received 102 cars in August. How many cars does he have now? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 7 Teacher & Student Collaborate | Write an expression to model the problem above: NOW Step Two: Think about and talk about the problem. | | |
| S YOU DO | Step One: Read the problem Sally Mae baked 484 muffins. She sold 123 muffins on Monday and 84 on Tuesday. She then baked an additional 65 muffins on Wednesday. How many muffins does she have now? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 7 Student Completes Independently | Write an expression to model the problem above: NOW Step Two: Think about and talk about the problem. | | |

Student Name: Date: Step Four: Solve the problem Step One: Read the problem Step Three: Write HOW you will Use the table below to answer the questions: solve the problem on the lines using pictures, words, or numbers. 20 **Dart Practice Results** below: Name Increase Decrease No change Н Buck 37 14 25 5 Vance 28 Chip 8 18 32 Zell 31 15 12 Which player had more decreases **Card 8** Teacher Models than increases? Which player had five times the amount of increases than decreases? How many dart games were played in all?_ NOW ... Step Two: Think about and talk about the problem. Step One: Read the problem Step Three: Write HOW you will Step Four: Solve the problem Use the table below to answer the questions: 20 solve the problem on the lines using pictures, words, or numbers. Dice Roll Results below: М Ш Name 1 2 3 4 5 6 Cindy 4 4 4 7 5 2 Lisa 3 2 2 8 5 6 7 3 5 2 7 2 Penny 5 Bea 2 8 2 4 5 8 Teacher & Student Which player rolled more '6s' than '1s' and '2s' combined ? _ Collaborate Which player had four times the amount of '3s' than '2s'? How many times did each person roll altogether? Card NOW ... Step Two: Think about and talk about the problem. Step Three: Write HOW you will Step One: Read the problem Step Four: Solve the problem 2 Use the table below to answer the questions: solve the problem on the lines using pictures, words, or numbers. Soccer Games Results below: Name Wins Losses Ties **NOV** 14 5 Eagles 3 13 7 Falcons 2 Hawks 10 2 10 Owls 6 12 4 Which team had three times as many 8 Student Completes Independently losses as ties? Which two teams had more wins than losses and ties combined? How many games did each team play? Card NOW ... Step Two: Think about and talk about the problem.

| St | udent Name: | | Date: |
|--|---|--|--|
| I DO | Step One: Read the problem Karina is laying tile in a 14-foot by 12-foot room. Each piece of tile is 1-foot square. How many pieces of | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Teacher Models | tile will she need to complete the job? If she only wanted to put tiles around the edge of the room, how many pieces of tiles would she need? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Kipp is laying sod on a 18-yard by 9-yard lawn. Each piece of sod is 1-yard square. How many pieces of sod will he need to complete the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Teacher & Student Collaborate | job? If he only wanted to put sod around the edge of the lawn, how many pieces of sod would he need? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Chester is laying paving stones on a 20-foot by 8-foot driveway. Each stone is 1-foot square. How many stones will he need to | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 9 Student Completes Independently | complete the job? If he only wanted to put stones around the edge of the driveway, how many pieces of stone would he need? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem What is the standard form for forty-three million, nine hundred seventy-two thousand, eleven? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem What is the standard form for sixteen million, eight thousand, two hundred fifty-one? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem What is the standard form for twenty-one million, four hundred eighty thousand, nine hundred two? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 10 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Make a Venn diagram to solve the problem below: DeeDee surveyed her class to find out | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 11 Teacher Models | which kind of pizza each person likes. The results showed that 9 like cheese, 8 like pepperoni, 3 like sausage, 2 like both cheese and pepperoni, 2 like pepperoni and sausage, 3 like cheese and sausage, and 2 like all three kinds. How many students were surveyed? NOW Step Two: Think about and talk about the problem. | | |
| DO | Step One: Read the problem Make a Venn diagram to solve the problem below: | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| WE | Bob surveyed factory workers in his town about which shift they prefer to work. The results showed that 22 like | | |
| Card 11 Teacher & Student Collaborate | mornings, 14 like afternoons, 13 like nights, 17 like both mornings and afternoons, 21 like both mornings and nights, 19 like afternoons and nights, and 5 like all three shifts. How many factory workers were surveyed? NOW Step Two: Think about and talk about the problem. | | |
| DO | Step One: Read the problem Make a Venn diagram to solve the problem below: | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| bletes YOU | Chloe surveyed 3 rd graders in her school to find out what their favorite subjects are. The results showed that 18 like reading, 17 like math, 12 like science, 25 like both reading and math, 28 like both reading and | | |
| Card 11 Student Completes Independently | science, 9 like both math and science, and 5 like all three subjects. How many 3 rd graders were surveyed? NOW | | |
| Ŭ | Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|--|--|
| Card 12 Teacher Models I DO | Step One: Read the problem Justine has 3 rolls of 50 dimes each. She has an additional 15 dimes and 43 nickels. How much money in dimes does Justine have? NOW Step Two: Think about and talk | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| | about the problem. | | |
| WE DO | Step One: Read the problem Waylon has 4 rolls of 50 dimes each. He has an additional 32 dimes and 8 quarters. How much money in dimes does Waylon have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Candy has 5 rolls of 50 dimes each. She has an additional 18 dimes and 15 nickels. How much money in dimes does Candy have? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 12 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | Date: | |
|---|---|--|--|
| I DO | Step One: Read the problem The Panda Bus Line carries an average of 39 passengers on its Los Angeles to San Diego route. It | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher Models | runs 803 of those trips per year. About how many passengers does it carry on that route per year? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Franklin types an average of 512 words per page. He completed a total of 198 pages last year. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 Teacher & Student Collaborate | About how many words did he type in all last year? NOW Step Two: Think about and talk about the problem. | | |
| 3 Student Completes Independently | Step One: Read the problem Hawk Airlines carries an average of 138 passengers on its Portland to Cleveland flight. It runs 427 such flights each year. About how many passengers does it carry on those flights each year? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 13 In | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem How many dogs will there be in each group if you divide 122,376 dogs into 8 equal groups? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One : Read the problem How many people will there be in each group if you divide 69,350 people into 5 equal groups? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem.NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem How many cats will there be in each group if you divide 114,667 cats into 7 equal groups? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 14 Student Completes Independently | NOW Step Two: Think about and talk about the problem.NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | Date: | |
|---|--|--|--|
| I DO | Step One: Read the problem It took Chad 8 hours to drive to his brother's apartment. If he | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher Models | drove 62 miles per hour, how far did he drive in all? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem It took Lori Beth 9 hours to drive to Seattle, Washington. If she | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Teacher & Student Collaborate | drove 65 miles per hour, how far did she drive in all? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem It took Walter 11 hours to drive to Canada. If he drove 58 miles per hour, how far did he drive in | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 15 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Brownies are packed in boxes. There are 6 rows with 4 brownies in a row in each layer. There are 4 identical layers separated by cloth | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher Models | material. How many brownies are packed in one box? How many brownies would there be in 7 boxes? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Wine glasses are packed in cartons. There are 5 rows with 7 glasses in a row in each layer. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Teacher & Student Collaborate | There are 3 identical layers separated by packing material. How many wine glasses are packed in one carton? How many wine glasses would there be in 6 cartons? NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Crystal vases are packed in crates. There are 3 rows with 6 vases in a row in each layer. There are 5 identical layers separated by | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 16 Student Completes Independently | packing material. How many vases are packed in one crate? How many vases would there be in 9 cartons? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem William cut an 8.4 foot board in half. He then cut both of the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher Models | pieces in half again. What is the length of each of the pieces? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Hank cut a 16.8 foot rope in half. He then cut both of the pieces in half again. What is the length of | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Teacher & Student Collaborate | each of the pieces? NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Cedrick cut a 24.8 foot vine in half. He then cut both of the pieces in half again. What is the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 17 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Vern ran 4 $\frac{1}{2}$ miles on Wednesday, 3 $\frac{3}{4}$ miles on Thursday, and 5 $\frac{1}{4}$ miles on Saturday. How many miles | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Teacher Models | did he run in all? What is the answer in decimal form? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Roderick ate 8 $\frac{1}{4}$ bags of peanuts during week one, 4 $\frac{1}{2}$ bags of peanuts during week two, and 5 $\frac{1}{2}$ bags of peanuts in week three. How many bags of peanuts did | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Teacher & Student Collaborate | Roderick eat during the three weeks? What is the answer in decimal form? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Chelsea bought 6 ³ / ₄ pounds of flour in October, 4 ³ / ₄ pounds of flour in November, and 8 ³ / ₄ pounds | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 18 Student Completes Independently | of flour in December. How many pounds of flour did she buy in all? What is the answer in decimal form? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem The local grocery store is having a sale. A can of soda is \$0.84 each. If you buy five cans you get the next one for half price. How much would 2 dozen cans of soda cost? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Carnations are on sale at Katherine's Flower Shop. Each carnation is \$0.62 each. If you | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 19 Teacher & Student Collaborate | buy five carnations you get the next one for half price. How much would 3 dozen cost? NOW Step Two: Think about and talk | | |
| U DO | about the problem Step One : Read the problem Emily is selling chocolate bars at | Step Three : Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| ²² YOU | \$0.96 each. If you buy five chocolate bars you get the next one for half price. How much would 1 dozen cost? | | |
| Card 19 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem How many different ways can you make rectangular arrays for the number 32? What are they? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem How many different ways can you make rectangular arrays for the number 42? What are they? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem How many different ways can you make rectangular arrays for the number 50? What are they? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 20 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|--|--|--|--|
| I DO | Step One: Read the problem Dana has two cuckoo clocks. One must be wound every 8 days and the other must be wound every 10 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 21 Teacher Models | days. Dana winds up both clocks on March 26. When is the next time she will have to wind both of the clocks on the same day? NOW Step Two: Think about and talk about the problem. | | |
| Card 21 Teacher & Student Collaborate | Step One: Read the problem Adrian has two tarantulas. One must be fed every 7 days and the other must be fed every 9 days. Adrian feeds both tarantulas on June 18. When is the next time he will have to feed both of the tarantulas on the same day? NOW Step Two: Think about and talk about the problem | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 21 Student Completes Independently | about the problem. Step One: Read the problem David has two cactus plants in his room. One must be watered every 15 days and the other must be watered every 10 days. David waters both plants on August 24. When is the next time he will have to water both of the plants on the same day? NOW Step Two: Think about and talk about the problem. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |

| | Student Name: | | Date: |
|---|--|---|--|
| I DO | Step One: Read the problem The Kendrick family just finished eating Thanksgiving dinner and are about to eat dessert. There are 4 pies that are cut into 8 slices each. They eat a total of 31 slices. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher Models | Write a mixed number that shows how many pies they ate in all: NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Kimberly ordered 7 pizzas for her daughter's birthday party. Each pizza was divided into 6 slices | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Teacher & Student Collaborate | each. A total of 28 slices were eaten. Write a mixed number that shows how many pizzas they ate in all: NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Nadia's baking class baked 5 cakes. Each cake was divided into 12 slices. A total of 45 slices were | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 22 Student Completes Independently | eaten. Write a mixed number that shows how many cakes they ate in all: NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|---|
| I DO | Step One: Read the problem The city theater is having an audition to cast a play of 18 people. One hundred people audition for the parts. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher Models | What percent shows the portion of people who try out but don't get parts? What percent shows the number of people who <i>did</i> get parts in the play? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Simon has 100 marbles and is selling only the yellow ones. He has a total of 21 yellow marbles. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 23 Teacher & Student Collaborate | What percent shows the portion of marbles that are not yellow? What percent shows the number of marbles that <i>are</i> yellow? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem A total of 100 young men and women began training for the police academy. Only 67 of them completed the training. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 23 Student Completes Independently | What percent shows the portion of people who did not complete the training? What percent shows the number of people who <i>did</i> complete the training? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|---|--|
| I DO | Step One: Read the problem Mrs. Anderson traveled 45.2 miles on Monday and 38.06 miles on Tuesday. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Teacher Models | How many more miles did Mrs. Anderson travel on Monday than on Tuesday? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Missy walked for 32.8 minutes on Saturday and 45.07 minutes on Sunday. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Teacher & Student Collaborate | How many more minutes did Missy walk on Sunday than on Saturday? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Max worked for 5.6 hours on Wednesday and 7.03 hours on Thursday. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 24 Student Completes Independently | How many more hours did Max work on Thursday than on Wednesday? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | Date: | |
|---|---|--|--|
| I DO | Step One: Read the problem Jacob charges \$12 to tutor a student in math for $\frac{3}{4}$ hour. Marsha goes to tutoring with Jacob on Monday, Wednesday, and | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher Models | Friday but only stays for $\frac{1}{2}$ hour each time. How much does Marsha pay per session? How much does she pay per week? If she paid for the week with a \$50 bill, how much change would she get back? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Diana rented a decorated arch for her wedding. The Rental cost was \$4 per $\frac{1}{2}$ hour. Diana picked up the arch at 10:00 a.m. and returned it | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Teacher & Student Collaborate | at 3:15 p.m. How much did Diana pay to rent the arch? If she paid for the rental with a \$50 bill, how much change would she get back? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem The city attorney charges \$20 for every $\frac{1}{4}$ hour of legal work. Helen needed help with a legal case and hired the city attorney. The city attorney began working on the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 25 Student Completes Independently | case at 9:30 a.m. and finished at 12:15 p.m. How much did Helen pay the city attorney? If she paid with three \$100 bills, how much change would she get back? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem The sum of the 4 digits of an even number is 25. The digit in the hundreds place is 7 more than the digit in the tens place, but 1 more | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher Models | than the digit in the ones place. What is the number? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem The sum of the 4 digits of an odd number is 9. The digit in the tens place is 4 less than the digit in the ones place, but 1 more than the digit in the hundreds place. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem The sum of the 4 digits of an even number is 13. The digit in the hundreds place is 3 more than the digit in the tens place, but 6 more | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 26 Student Completes Independently | than the digit in the ones place. What is the number? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|---|---|
| I DO | Step One: Read the problem Ned bought 3 lb. of beans at \$0.68 a pound, 12 lb. of potatoes at \$1.23 a pound, and 4 sacks of rice for \$2.18 each. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher Models | How much was the total bill? If Ned paid with a \$100 bill, how much change would he get back? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Wynona sold 5 gallons of sweet tea at \$3.79 a gallon, 2 gallons of un-sweet tea at \$2.54 a gallon, and 7 candy bars \$0.98 each. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 27 Teacher & Student Collaborate | How much money did Wynona make? If the buyer paid with a \$50 bill, how much change did he get back? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Mrs. Long bought 6 lb. of chicken at \$2.65 a pound, 6 lb. of steak at \$5.50 a pound, and 9 packs of hotdogs for \$3.01 each. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 27 Student Completes Independently | How much was the total bill? If Mrs. Long paid with a \$100 bill, how much change did she get back? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|---|--|
| I DO | Step One: Read the problem Katie read a total of 14 hours in one week. Her friend Joel read 19 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher Models | hours and her other friend Zach read 15 hours. What was the average number of hours read by the three friends? | | |
| WE DO | Step One: Read the problem Sabrina stayed awake for 25 hours straight. He sister stayed awake for 21 hours and her brother stayed awake for 17 | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Teacher & Student Collaborate | hours. What was the average number of hours the three siblings stayed awake? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Paola received 32 letters in the mail during military boot camp training. Her friend Shelly received 30 letters and her other | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 28 Student Completes Independently | friend Tyra received 38 letters. What was the average number of letters the three received? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Kyle worked on homework for $3/5$ of an hour before dinner and another $1/2$ of an hour after | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Teacher Models | dinner. How much time did Kyle spend on homework? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Iesha picked ${}^{3}/{}_{7}$ of a bucket of blueberries before breakfast and another ${}^{2}/{}_{5}$ of a bucket after | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Tony sold $^{2}/_{3}$ of a gallon of paint in the morning and another $^{4}/_{5}$ of a gallon of paint in the afternoon. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 29 Student Completes Independently | How much paint did Tony sell in all? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|---|---|--|
| I DO | Step One: Read the problem What are the next two numbers in the pattern? | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Teacher Models | NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem What are the next two numbers in the pattern? $1/_{10}$, $7/_{10}$, $1^{3}/_{10}$, $1^{9}/_{10}$, $2^{2}/_{10}$, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Teacher & Student Collaborate | NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem What are the next two numbers in the pattern? $1/_{12}$, $9/_{12}$, $1^{5}/_{12}$, $2^{1}/_{12}$, $2^{9}/_{12}$, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 30 Student Completes Independently | NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|----------------------------------|--|--|------------------------------------|
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| 0 | Bonnie, Rex, and Yuri are each | solve the problem on the lines | using pictures, words, or numbers. |
| 2 | painting a room. One room is being | below: | |
| | painted red, one room yellow, and | | |
| | one room blue. The first letter of | | |
| | each person's name is different | | |
| | from the first letter of the color | | |
| <u>s</u> | he/she is painting with. Rex is not | | |
| Teacher Models | using blue paint. | | |
| er V | Who is using red paint? | | |
| sach | Who is using yellow paint? | | |
| 1 Te | Who is using blue paint? | | |
| d 31 | | | |
| Card | NOW | | |
| | Step Two: Think about and talk about the problem. | | |
| | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| 0 | Step One: Read the problem | solve the problem on the lines | using pictures, words, or numbers. |
| DO | Sherri, Blair, and Alvin are in a | below: | |
| ш | singing group. One person sings | | |
| WE | soprano, another sings alto, and | | |
| | the third sings bass. The first | | |
| | letter of each person's name is | | |
| ent | different from the first letter of | | |
| tude | the part he/she sings. Alvin does | | |
| & S te | not sing soprano. | | |
| :her oora | Who sings soprano? | | |
| Teacher & Student Collaborate | Who sings alto? | | |
| 31 ⁷ | Who sings bass? | | |
| Card | NOW | | |
| ŭ | Step Two: Think about and talk | | |
| | about the problem. | | |
| DO | Step One: Read the problem | Step Three: Write HOW you will | Step Four: Solve the problem |
| Δ | Stella, Charlie, and Harvey are | solve the problem on the lines below: | using pictures, words, or numbers. |
| С | grilling out. One person is grilling | Delow | |
| YOU | chicken, one is grilling hamburger, | | |
| > | and one is grilling steak. The first | | |
| | letter of each person's name is | | |
| es | different from the first letter of | | |
| Student Completes dependently | the meat he/she is cooking. Stella | | |
| Com itly | is not grilling chicken. | | |
| 1 Student Con Independently | Who is grilling chicken? | | |
| Stud Jepei | Who is grilling hamburger? | | |
| 31 9 Ind | Who is grilling steak? | | |
| Card : | NOW | | |
| ŭ | Step Two: Think about and talk | | |
| | about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem The Campbell's Bank offers different interest rates for its customers. Deposits between \$1 and \$1,000 earn 0.04 on each | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Teacher Models | dollar and deposits between \$1,001 and \$1,500 earn 0.05 on each dollar. If Evan deposits \$1,258 in an account, how much money will be in the account after one year? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem The Smithfield Bank offers a variety of different interest rates for its customers. Deposits between \$1 and \$250 earn 0.02 on each dollar, deposits between | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Teacher & Student Collaborate | \$251 and \$500 earn 0.03 on each dollar, and deposits over \$500 earn 0.04 on each dollar. If Sue deposits \$265 in an account, how much money will be in the account after one year? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem The Eastside National Bank has different interest rates for its accounts. Deposits between \$1 and \$500 earn 0.05 on each dollar, deposits between \$501 and | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 32 Student Completes Independently | \$1,000 earn 0.04 on each dollar, and deposits over \$1,000 earn 0.03 on each dollar. If Sue deposits \$92 in an account, how much money will be in the account after one year? NOW Step Two: Think about and talk about the problem. | | |

| St | udent Name: | | Date: |
|---|---|--|--|
| I DO | Step One: Read the problem Ariela had color guard practice at 4:15 p.m. The practice lasted 2 hours and 20 minutes. She then went out to eat with her | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Teacher Models | boyfriend Zach. They finished eating one hour and 40 minutes after practice let out. It then took 20 minutes to drive home. At what time did Ariela arrive at home? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Georgette had a doctor's appointment at 10:30 a.m. It took her 25 minutes to drive to the doctor's office. Before leaving her | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Teacher & Student Collaborate | house, it took her 15 minutes to shower and another 25 minutes to get dressed. At what time did Georgette take her shower? NOW Step Two: Think about and talk about the problem. | | |
| you do | Step One: Read the problem John met his best friend at the movie theater at 6:15 p.m. They bought tickets for a movie that started 15 minutes later. The | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 33 Student Completes Independently | movie lasted 2 hours and 25 minutes. Immediately afterwards they ran into two other friends in the lobby and stopped to talk for 15 minutes before leaving. At what time did they leave the movie theater? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Rory answered 22 out of 25 questions correctly on her science test. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher Models | What percentage did she get correct? What percentage did she <i>not</i> get correct? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Nelly answered 17 out of 20 questions correctly on her math test. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Teacher & Student Collaborate | What percentage did she get correct? What percentage did she <i>not</i> get correct? NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Dave answered 25 out of 40 questions correctly on his English test. | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 34 Student Completes Independently | What percentage did he get correct? What percentage did he <i>not</i> get correct? NOW Step Two: Think about and talk about the problem. | | |

| Student Name: | | Date: | |
|---|---|--|---|
| DQ I | Step One: Read the problem Dolly flew in a straight line from Atlanta to Nashville and then on to Salt Lake City. Salt Lake city is 1878 miles from Atlanta. If the | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher Models | distance between Atlanta and Nashville is 253 miles, how far is Nashville from Salt Lake City? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Megan traveled in a straight line from Chicago to Birmingham and then on to Panama City Beach. Panama City Beach is 941 miles | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 35 Teacher & Student Collaborate | from Chicago. If the distance between Chicago and Birmingham is 662 miles, how far is Birmingham from Panama City Beach? NOW Step Two: Think about and talk about the problem. | | |
| YOU DO | Step One: Read the problem Arsenio traveled in a straight line from New York City to Springfield and then on to Los Angeles. Los Angeles is 2780 miles from New | Step Three : Write HOW you will solve the problem on the lines below: | Step Four : Solve the problem using pictures, words, or numbers. |
| Card 35 Student Completes Independently | York City. If the distance between New York City and Springfield is 662 miles, how far is Los Angeles from Springfield? NOW Step Two: Think about and talk about the problem. | | |

| | Student Name: | | Date: |
|---|--|--|--|
| I DO | Step One: Read the problem Leigh Ann makes \$2607.35 each month. She pays \$750.50 for rent, \$137.32 for utilities, | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher Models | \$289.01 for her car, \$152.73 for credit cards, and \$310.59 for food. She then deposits $\frac{1}{2}$ of the money left over into her savings account. How much money is she left with each month? NOW Step Two: Think about and talk about the problem. | | |
| WE DO | Step One: Read the problem Noah makes \$1634.45 each month. He pays \$547.30 for rent, \$98.05 for utilities, \$164.10 for his car, and \$205.60 for food. He then | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Teacher & Student Collaborate | deposits ¼ of the money left over into his bank account. How much money is he left with each month? NOW Step Two: Think about and talk | | |
| YOU DO | about the problem. Step One: Read the problem Karen and Bob together make \$3476.25 each month. They pay \$1200.69 for their house, \$415.05 for utilities, \$528.99 for | Step Three: Write HOW you will solve the problem on the lines below: | Step Four: Solve the problem using pictures, words, or numbers. |
| Card 36 Student Completes Independently | their cars, \$84.60 for insurance, and \$679.48 for food. They then deposit $\frac{1}{2}$ of the money left over into their retirement accounts. How much money are they left with each month? NOW Step Two: Think about and talk about the problem. | | |

I DO WE DO YOU DO

Math Problem Solving Intervention Answers

First Grade US/BL: Five grapes DP #1: 7 books DP #2: 6 puppies DP #3: 2 dimes; 20 cents DP #4: 1 purple block DP #5: 6 miles DP #6: 8 cars DP #7: 5 stacks DP #8: 70 plants DP #9: 37 pounds; 35 pounds DP #10: 7 children DP #11: 13 canoes DP #12: 5 people Card #1 I DO: 7 cats WE DO: 8 flowers YOU DO: 9 elephants Card #2 I DO: 6 owls WE DO: 7 children YOU DO: 9 flowers Card #3 I DO: 6+1=7 WE DO: 3+6=9 YOU DO: 3+5=8 Card #4 I DO: 5+1 WF DO: 3+2 YOU DO: 3+4 Card #5 I DO: 9 cents WE DO: \$10 YOU DO: \$7 Card #6 I DO: 2 apples WF DO: 1 cat YOU DO: 4 coconuts Card #7 I DO: 5 fish WE DO: 4 books YOU DO: 4 chairs Card #8 I DO: 2 dimes; 20 cents WE DO: 3 guarters; 75 cents YOU DO: 5 dimes; 50 cents Card #9 I DO: 3 red books WE DO: 1 stick of gum YOU DO: 5 tomatoes Card #10 I DO: 6 miles, 12 miles WE DO: 14 miles, 21 miles YOU DO: 10 miles, 15 miles Card #11 I DO: 3 cookies WE DO: 4 coins YOU DO: 5 marbles Card #12 I DO: add 3 WE DO: add 4 YOU DO: add 2

Card #13 I DO: 8+1=9; 5:2=3; 4+6=10 WE DO: 7+2=9; 7:3=4 YOU DO: 5+0=5; 6+3=9 Card #14 I DO: 6+2=8; 2+6=8; 8-2=6; 8-6=2 WE DO: 3+5=8; 5+3=8; 8-5=3; 8-3=5 YOU DO: 6+4=10; 4+6=10; 10-6=4; 10-4=6 Card #15 I DO: 6, 2, 8 WE DO: 5, 7, 12 YOU DO: 4, 5, 9 Card #16 I DO: 3 children; 2 children; 2 children WE DO: 3 children; 5 children; 1 child YOU DO: four children; five children; two children Card #17 I DO: 6 boxes WE DO: 4 bags YOU DO: 8 bags Card #18 I DO: 46 pears WE DO: 89 carrots YOU DO: 37 cards Card #19 I DO: 35 rings WE DO: 48 fish YOU DO: 67 pictures Card #20 I DO: 23 games WE DO: 28 pages YOU DO: 6 laps Card #21 I DO: 30 teddy bears WE DO: 3 songs YOU DO: 32 books Card #22 I DO: less-than symbol (<) WE DO: greater than symbol (>) YOU DO: less than symbol (<) Card #23 I DO: 57 inches WE DO: 69 cows YOU DO: 57 movies Card #24 I DO: 69 pounds; 67 pounds WE DO: 90 minutes; 88 minutes YOU DO: 75 seashells; 73 seashells Card #25 I DO: 50 flowers; 30 flowers WE DO: 50 CDs; 70 CDs YOU DO: 40 baseball cards; 20 baseball cards Card #26 I DO: about 20 students WE DO: about 50 lemon drops YOU DO: about 70 steps Card #27 I DO: 36 WE DO: 72 YOU DO: 41

Card #28 I DO: 56, 46, 36 WE DO: 32, 22, 12 YOU DO: 27, 17, 7 Card #29 I DO: heart, star, smiley WE DO: left arrow, right arrow, donut YOU DO: lightning bolt, hourglass, rainbow Card #30 I DO: 5 children WE DO: 4 people YOU DO: three gifts Card #31 I DO: 12 soccer goals WE DO: 10 days YOU DO: 13 frisbees

Second Grade

US/BL: 7 groups DP #1: 64 pencils DP #2: 15 candles DP #3: 56 bird houses; 0+56=56 DP #4: \$51 DP #5: 43 kids DP #6: 52 doctors DP #7: 27 boxes DP #8: \$30.45 DP #9: 13 inches DP #10: \$5 DP #11: 90; 4; 600 DP #12: 504 Card #1 I DO: 50 cards WE DO: 70 books YOU DO: 40 CDs Card #2 I DO: 5 tens and 7 ones WE DO: 8 tens and 3 ones YOU DO: 7 tens and 1 one Card #3 I DO: 40 CDs WE DO: 20 gumdrops YOU DO: 20 miles Card #4 I DO: 24 stickers WE DO: 21 pictures YOU DO: 40 words Card #5 I DO: 3 frogs WE DO: 5 children YOU DO: 3 children Card #6 I DO: 14 items WE DO: 9 pets YOU DO: 11 books

Card #32 I DO: 59 buttons WE DO: 64 pages YOU DO: 93 tickets Card #33 I DO: 23 bird houses WE DO: \$30 YOU DO: 15 birds Card #34 I DO: 3 students WE DO: 5 people YOU DO: \$20 Card #35 I DO: 14 flat surfaces WE DO: 18 flat surfaces YOU DO: 14 flat surfaces Card #36 I DO: 286, 293, 300, 307, 314 WE DO: 695, 699, 703, 707, 711 YOU DO: 512, 517, 522, 527, 532

Card #7 I DO: 9 books; 9+0=9 WE DO: 5 laps; 0+5=5 YOU DO: 5 blocks; 5+0=5 Card #8 I DO: 5 mechanics: 8-3=5 WE DO: 3 zebras: 5-2=3 YOU DO: 2 students; 7-5=2 Card #9 I DO: true WE DO: false YOU DO: false Card #10 I DO: 49 seashells WE DO: 58 butterflies YOU DO: 59 fish Card #11 I DO: 37 crackers WE DO: 31 pages YOU DO: 37 pennies Card #12 I DO: 70 WE DO: 70 YOU DO: 90 Card #13 I DO: 5 cups WE DO: 2 red apples YOU DO: 5 purple dresses Card #14 I DO: 62 chocolate covered cherries WE DO: 43 treats YOU DO: 26 children Card #15 I DO: 20 doughnuts

WE DO: 13 dogs

YOU DO: 22 minutes

Card #16 I DO: 34 hot dogs WE DO: 28 students YOU DO: 14 pets Card #17 I DO: Will, Toby WE DO: Tina, Simon YOU DO: Trixie, Amanda Card #18 I DO: 20 flowers WE DO: 15 hours YOU DO: 13 vegetables Card #19 I DO: 35 cans WE DO: 12 necklaces YOU DO: 21 bottles Card #20 I DO: 73 minutes WE DO: 95 minutes YOU DO: 114 minutes Card #21 I DO: 47 circles WE DO: 29 tickets YOU DO: 58 seashells Card #22 I DO: 5 magazines WE DO: 22 nickels YOU DO: 42 stamps Card #23 I DO: yes; 31 cents WE DO: yes; 17 cents YOU DO: yes; 10 cents Card #24 I DO: \$18.70 WE DO: \$7.35 YOU DO: \$13.80 Card #25 I DO: \$7.50 WE DO: \$4.50 YOU DO: \$2.50

Card #26 I DO: 6:25 p.m. WE DO: 8:00 a.m. YOU DO: 10:25 a.m. Card #27 I DO: 17 pounds WE DO: 14 inches YOU DO: 25 minutes Card #28 I DO: 8 feet WE DO: 3 feet YOU DO: 2 feet Card #29 I DO: 70 degrees WE DO: 25 degrees YOU DO: 42 degrees Card #30 I DO: \$4 WE DO: \$2 YOU DO: \$2 Card #31 I DO: 400 marbles WE DO: 700 cards YOU DO: 800 lemon drops Card #32 I DO: 40; 300; 5 WE DO: 90; 700; 3 YOU DO: 80; 0; 600 Card #33 I DO: 76+401=477 WE DO: 67+97=164 YOU DO: 76+401=477 Card #34 I DO: 624, 627, 630, 633 WE DO: 739, 744, 749, 754 YOU DO: 241, 245, 249, 253 Card #35 I DO: 840 WE DO: 462 YOU DO: 907 Card #36 I DO: 1,004 WE DO: 1,077

Third Grade

US/BL: 726; 636; 735 DP #1: 2,489; 9,842 DP #2: 882 employees, 900, 880 DP #3: 29 hotdogs DP #4: 14 half dollars; 28 quarters; 70 dimes; 140 nickels; 700 pennies DP #5: 70 strawberry plants DP #5: 70 strawberry plants DP #6: 9 pine trees DP #7: \$15.13 DP #8: 27 men DP #9: Add 12; 813, 825 DP #10: ¹¹ /₁₅; ⁴/₁₅ DP #11: 4:00 p.m. DP #12: 34,011; 34,022; 33,912; 35,012; 24,012 Card #1 I DO: 29 birdhouses WE DO: 75 books YOU DO: 42 miles Card #2 I DO: 574; 484; 583 WE DO: 704; 614; 713 YOU DO: 319; 229; 328 Card #3 I DO: 1,257; 7,521 WE DO: 3,489; 9,843 YOU DO: 1,368; 8,631

YOU DO: 1,040

Card #4

I DO: 56,231; 50,031; 56,312; 53,019

WE DO: 92,418; 90,008; 915; 94,287 YOU DO: 47,359; 47,059; 40,700; 40,007 Card #5 I DO: 400 & 500; 30 & 40; 400; 440 WE DO: 700 & 800; 50 & 60; 800; 750 YOU DO: 300 & 400; 80 & 90; 400; 390 Card #6 I DO: 991 students; 1,000; 990 WE DO: 1,261 chefs; 1,300; 1,260 YOU DO: 537 butterflies; 500; 540 Card #7 I DO: 95 stamps; 9 years WE DO: 79 songs; 12 years YOU DO: 96 words; 20 years Card #8 I DO: 45 fish WE DO: \$163 YOU DO: 138 hotdogs Card #9 I DO: \$36 WE DO: \$68 YOU DO: \$74 Card #10 I DO: 1,810 cans WE DO: 1,916 pennies YOU DO: \$1,499 Card #11 I DO: 18 half dollars, 36 guarters, 90 dimes, 180 nickels, 900 pennies WE DO: 12 half dollars, 24 guarters, 60 dimes, 120 nickels, 600 pennies YOU DO: 16 half dollars, 32 guarters, 80 dimes, 160 nickels, 800 pennies Card #12 I DO: 40 cookies WE DO: 24 post cards YOU DO: 30 pencils Card #13 I DO: 16 balloons; 32 balloons WE DO: 6 games; 18 games YOU DO: \$8; \$32 Card #14 I DO: July 14th; July 3rd WE DO: March 21st; March 9th YOU DO: December 13th; December 11th Card #15 I DO: 48 plants WE DO: 90 books YOU DO: 32 rooms Card #16 I DO: 5 crackers WE DO: 10 students YOU DO: 6 cards Card #17 I DO: 12 flowers WE DO: 9 students YOU DO: 12 cars Card #18 I DO: 28 years old; 33 years old WE DO: 6 years old; 16 years old YOU DO: 29 years old; 66 years old Card #19 I DO: 40 crackers WE DO: 50 books

YOU DO: 57 peanuts Card #20 I DO: 29 people; blue; 1 person WE DO: 40 people; cat; 12 people YOU DO: 36 people; Lincoln; 10 people Card #21 I DO: \$17.71 WE DO: \$35.68 YOU DO: \$5.85 Card #22 I DO: Sigmund WE DO: Wanda YOU DO: Donavan Card #23 I DO: 7,000; 20,000; 5; 900 WE DO: 60; 2; 90,000; 3,000 YOU DO: 40; 3; 8,000; 700 Card #24 I DO: 31 students WE DO: 28 girls YOU DO: 27 boys Card #25 I DO: 20 inches: 16 inches WE DO: 12 inches; 20 inches YOU DO: 28 inches; 32 inches Card #26 I DO: \$1.97 WE DO: \$2.86 YOU DO: \$5.75 Card #27 I DO: Add eleven; 458; 469 WE DO: Add 50; 598; 648 YOU DO: Add 5; 903; 908 Card #28 I DO: 7/8; 1/8 WE DO: 5/6; 1/6 YOU DO: 3/5; 2/2 Card #29 I DO: 9/10; 1/10 WE DO: ⁹/₉ = 1; 0 YOU DO: ⁸/₁₂ = ²/₃; ⁴/₁₂ = ¹/₃ Card #30 I DO: $^{2}/_{4}$ or $\frac{1}{2}$ WE DO: 3/8 YOU DO: $\frac{6}{16} = \frac{3}{8}$ Card #31 I DO: \$27.64 WE DO: \$24.09 YOU DO: \$24.01 Card #32 I DO: 1,308 people WE DO: 945 people YOU DO: 416 people Card #33 I DO: 3:30 p.m. WE DO: 5:15 p.m. YOU DO: 3:00 p.m. Card #34 I DO: 2 pumpkins WE DO: 3 nickels YOU DO: 5 army men Card #35

WE DO: 80,130; 80,119; 80,229; 79,129; 70,129 YOU DO: 45,042; 45,051; 44,951; 44,041; 35,041

Card #36

Fourth Grade

US/BL: \$19.33 DP #1: 41 cents DP #2: 81,372; 81,802; 87,302; 91,302 DP #3: 799 miles DP #4: Multiply by 7 DP #5: \$13.75 DP #6: 96 cabbages DP #7: \$350 DP #8: 17 pieces DP #9: 538 DP #10: 10 5/8 gallons DP #11: black puppy, spotted puppy DP #12: 19.2 miles Card #1 I DO: \$14.60 WE DO: \$11.52 YOU DO: \$19.62 Card #2 I DO: 923 WE DO: 437 YOU DO: 182 Card #3 I DO: 63 cents WE DO: 10 cents YOU DO: 70 cents Card #4: I DO: 845,091; 845,190; 854,901; 854,910 WE DO: 329,152; 329,321; 392,215; 392,512 YOU DO: 768,109; 768,910; 786,019; 786,091 Card #5 I DO: About 2,300 people WE DO: About 2,400 people YOU DO: About 1,400 people Card #6 I DO: 76,449; 76,689; 78,389; 96,389 WE DO: 29,048; 29,918; 30,018; 69,018 YOU DO: 51,680; 51,830; 59,630; 81,630 Card #7 I DO: \$22.15 WE DO: \$14.49 YOU DO: \$1.34 Card #8 I DO: \$240 WE DO: \$336 YOU DO: \$105 Card #9 I DO: 589 miles WE DO: 1,882 miles YOU DO: 1,269 miles Card #10 I DO: 6,407,281 WE DO: 3,904,112 YOU DO: 1,504,862 Card #11 I DO: Multiply by 5 WE DO: Multiply by 2

..... YOU DO: Multiply by 4 Card #12 I DO: 3,200; 2,700; 2,200 WE DO: 1,400; 3,720; 2,730 YOU DO: 3,360; 3,040; 1,380 Card #13 I DO: 6 miles WE DO: 10 miles YOU DO: 3 miles Card #14 I DO: 75 bricks; 15 bricks; 90 bricks WE DO: 45 blocks; 9 blocks; 54 blocks YOU DO: 54 blocks; 14 blocks; 68 blocks Card #15 I DO: \$19 WE DO: \$20 YOU DO: \$20 Card #16 I DO: 32 tiles WF DO: 28 stitches YOU DO: 61 cloth squares Card #17 I DO: 18 tulips WE DO: 90 golf balls YOU DO: 8 hammers Card #18 I DO: 840 lemons WE DO: 714 tickets YOU DO: 432 plates Card #19 I DO: \$517.65 WE DO: \$514.35 YOU DO: \$306 Card #20 I DO: \$110 WE DO: \$126 YOU DO: \$85 Card #21 I DO: \$46.28; yes WE DO: \$12.81; yes YOU DO: \$49.68; yes Card #22 I DO: 14 cupcakes WE DO: 3 apples YOU DO: 3 cards Card #23 I DO: 12 hours WE DO: 6 hours YOU DO: 12 hours Card #24 I DO: 30 floors WE DO: 72 seedlings YOU DO: 189 blocks Card #25

I DO: 678

I DO: 1st position, 3rd position, 2nd position, 4th

WE DO: Yancey, Luke, Paul, Chuck

YOU DO: Trip, Dorsey, Wally, Nick

position

WE DO: 931 **YOU DO: 420** Card #26 I DO: Paco's board is longer than 15 feet long WE DO: Reagan's pumpkin weighs more than 12 pounds YOU DO: Victor owns more than 40 acres of land Card #27 I DO: $\frac{6}{8}$; $\frac{3}{4}$; $\frac{2}{8}$, $\frac{1}{4}$ WE DO: 8/10; 4/5; 2/10; 1/5 YOU DO: 3/9; 1/3; 6/9; 2/3 Card #28 I DO: hot chocolate, apple cider, coffee WE DO: oil, antifreeze, gasoline YOU DO: blueberry, blackberry, strawberry Card #29 I DO: 5 ½ pizzas WE DO: 10 $\frac{1}{2}$ cups of juice YOU DO: 9²/₃ gallons of tea Card #30 I DO: 22 feet; 28 feet WE DO: 22 feet; 30 feet YOU DO: 38 feet; 90 feet Card #31

Fifth Grade

US/BL: 364,950; 365,030; 364550 DP #1: 26,400 pages DP #2: 8,710,375.8; 8,710,380; 8,710,000; 8,700,000 DP #3: 160 pieces, 52 pieces DP #4: \$35.80 DP #5: 17,422 passengers DP #6: 240 teacups; 1,680 cups DP #7: \$21.56 DP #8: 85%, 15% DP #9: \$12, \$36, \$14 DP #10: 44 1/3 stickers DP #11: \$1,473.93 DP #12: 2,760 miles Card #1 I DO: 463,091; 463,121; 462,591 WE DO: 829,530; 829,600; 828,630 YOU DO: 707,645; 707,705; 707,445 Card #2 I DO: 9,600 eggs WE DO: 27,000 lemon drops YOU DO: 10,000 cards Card #3 I DO: 4.3 miles WF DO: 4.075 miles YOU DO: 2.51 miles Card #4 I DO: 7,236,059; 7,236,590; 7,326,905 WE DO: 3,841,372; 3,841,732; 3,844,273 YOU DO: 9,058,163; 9,085,631; 9,508,316 Card #5 I DO: 7,208,641.1; 7,208,640; 7,210,000; 7.200.000 WE DO: 9,481,013; 9,481,010; 9,480,000; 9,500,000

I DO: 4.7 pounds WE DO: 10.5 pounds YOU DO: 3.9 pounds Card #32 I DO: Lillie; Millie WE DO: red book; yellow book YOU DO: level; screwdriver Card #33 I DO: \$4,002.86 WE DO: \$5,033,35 YOU DO: \$3,138.79 Card #34 I DO: $4^{4}/_{5}$ miles WE DO: $12^{4}/_{5}$ miles YOU DO: 8 9/10 hours Card #35 I DO: 2 ½ hours WE DO: 1 hour YOU DO: 4 1 miles Card #36 I DO: 7.8 miles WE DO: 16.2 pounds YOU DO: 5.7 feet YOU DO: 6,538,120.5; 6,538,120; 6,540,000; 6,500,000 Card #6 I DO: \$811,000 WE DO: \$226,000 YOU DO: 634,000 books Card #7 I DO: \$693; \$621 - \$84 - \$62 + \$218 WE DO: 192 cars; 216 - 54 - 72 + 102 YOU DO: 342 muffins; 484 - 123 - 84 + 65 Card #8 I DO: Chip; Vance; 232 dart games WE DO: Lisa; Bea; 26 games each YOU DO: owls; eagles & falcons; 22 games each Card #9 I DO: 168 pieces; 52 pieces WE DO: 162 pieces; 54 pieces YOU DO: 160 stones; 56 pieces Card #10 I DO: 43.972.011 WE DO: 16,008,251 YOU DO: 21,480,902 Card #11 I DO: 29 students WE DO: 111 factory workers YOU DO: 114 third graders Card #12 I DO: \$16.50 WE DO: \$23.20 YOU DO: \$26.80 Card #13 I DO: about 32,000 passengers WE DO: about 100,000 words YOU DO: 59,000 passengers Card #14

I DO: 15,297 dogs WE DO: 13,870 people YOU DO: 16,381 cats Card #15 I DO: 496 miles WE DO: 585 miles YOU DO: 638 miles Card #16 I DO: 96 brownies; 672 brownies WE DO: 105 wine glasses; 630 wine glasses YOU DO: 90 vases; 810 vases Card #17 I DO: 2.1 ft. WE DO: 4.2 ft. YOU DO: 6.2 ft. Card #18 I DO: 13 ½ miles; 13.5 miles WE DO: 18 ¹/₄ peanut bags; 18.25 YOU DO: 20 1/4 lbs of flour; 20.25 Card #19 I DO: \$18.40 WE DO: \$20.46 YOU DO: \$10.56 Card #20 I DO: 6 ways; 1x32; 32x1; 2x16; 16x2; 4x8; 8x4 WE DO: 6 ways; 42x1; 1x42; 2x21; 21x2; 6x7; 7x6 YOU DO: 6 ways; 50x1; 1x50; 2x25; 25x2; 5x10; 10×5 Card #21 I DO: May 5th WE DO: August 20th YOU DO: September 23rd Card #22 I DO: 3 ⁷/₈ pies WE DO: $4^{2}/_{3}$ pizzas YOU DO: 3 🛓 cakes Card #23 I DO: 82%; 18% WE DO: 79%; 21% YOU DO: 33%; 67% Card #24 I DO: 7.14 miles WE DO: 12.27 minutes YOU DO: 1.43 hours Card #25 I DO: \$8, \$24, \$26 WE DO: \$42; \$8

YOU DO: \$220; \$80 Card #26 I DO: 6,928 WE DO: 3,015 YOU DO: 4,630 Card #27 I DO: \$25.52; \$74.48 WE DO: \$30.89; \$19.11 YOU DO: \$75.99; \$24.01 Card #28 I DO: 16 hours WE DO: 21 hours YOU DO: 33 letters Card #29 I DO: $1^{1}/_{10}$ hours WE DO: ²⁹/₃₅ of a bucket YOU DO: 1 7/15 gallons Card #30 I DO: 2, 2 3/8 WE DO: 28/10, 34/10 YOU DO: 3 5/12, 4 1/12 Card #31 I DO: Bonnie, Rex, Yuri WE DO: Blair, Sherri, Alvin YOU DO: Harvey, Stella, Charlie Card #32 I DO: \$1,320,90 WE DO: \$272.95 YOU DO: \$96.60 Card #33 I DO: 8:35 p.m. WE DO: 9:25 a.m. YOU DO: 9:20 p.m. Card #34 I DO: 88%; 12% WE DO: 85%; 15% YOU DO: 63%, 38% Card #35 I DO: 1,861 miles WE DO: 669 miles YOU DO: 2,700 miles Card #36 I DO: \$483.60 WE DO: \$464.55 YOU DO: \$283.72 \odot \odot \odot