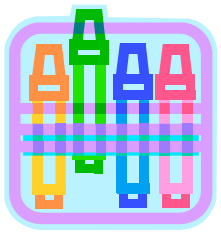


CONSTRUCTING TASK: Story Problems Revisited

Approximately 1 Day

STANDARDS FOR MATHEMATICAL CONTENT

MCC.2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

MCC.2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

MCC.2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

MCC.2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. *Example: If you have 2 dimes and 3 pennies, how many cents do you have?*

STANDARDS FOR MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

***Mathematical Practices 1 and 6 should be evident in EVERY lesson. ***

BACKGROUND KNOWLEDGE

Students should be able to discuss how to solve the word problems. They should also be able to think about what is happening in a story and picture the story in their minds including the objects and actions in the story. The following questions would be used to guide their thinking prior to this task:

- What happened first? What happened next?
- What does each amount in the story represent?
- How could we draw a picture to show what is going on in the story?

They should solve the problems using pictures, words, and numbers. They should act out the story to make sure pictures, words, and numbers that were used make sense.

ESSENTIAL QUESTIONS

- How do we solve problems in different ways?
- How can we show/represent problems in different ways?
- How can different combinations of numbers and operations be used to represent the same quantity?
- How is addition and subtraction alike and how are they different?
- How does using ten as a benchmark number help us add and subtract?

MATERIALS

- A large selection of manipulatives
- Paper
- "Story Problems: Part 2" student task sheet (1 per students)

GROUPING

Partner, Individual

TASK DESCRIPTION, DEVELOPMENT, AND DISCUSSION

Comment
Students are completing each of the problems in this task individually. In order to be successful in the task, students should have had multiple experiences solving problems involving addition and subtraction. This standard calls for students to add and subtract numbers within 100 in the context of one and two step word problems. Students should have ample experiences working on various types of problems that have unknowns in all positions using drawings, objects, and equations. Students can use place value blocks or number charts, or create drawings of place value blocks or number lines to support their work.

Part I
Have a brief discussion with the class where you do a few example problems, such as;

Gumdrops cost 2 cents each. I bought 4 gumdrops. How much did I spend?

Jake had 41 stickers in his book, 14 in his desk, and 26 under his bed. Sara has 50 stickers total. Who has more stickers? How many more do they have?

Present "Story Problems" task sheet and allow students to complete individually. Students can solve the problems any way they choose, using any manipulatives and tools they need. Remind

students to record their solutions with pictures, words, **and** numbers. Students should be prepared to share their solutions with the class.

FORMATIVE ASSESSMENT QUESTIONS

- What strategies did you use to solve the problems?
- Did you try to solve the problem more than one way?
- How did you determine which way, (equation, picture, words) to represent the number?
- Did you use skip counting to help you solve any of the problems? If so, which ones and how?
- How do you determine if an amount can be shared equally? Why should it be shared equally?

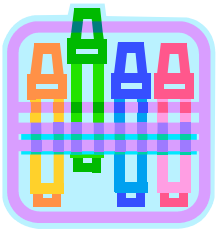
DIFFERENTIATION

Extension

- Have students show two strategies to solve each problem

Intervention

- Provide a 99 chart or number line to help with skip-counting.



Name: _____

Story Problems: Part 2

1. Jessica had 78 balloons. She gave away 40 to Kelly and Patti. How many does Jessica have now? Show your work.

2. If red tokens cost $1 each and Pat bought 7, then he bought 2 blue tokens that cost $5 each, how much more money did he spend on blue tokens?

3. I am thinking of an odd, 2 digit number. It is less than 60, but more than 40. The sum of the digits is 9. It is ten more than 35. What is my number? ___ Show your work.