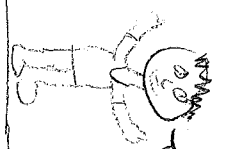


How do we solve word problems?



How do we show our thinking so other people can understand it?



Solving Story Problems

(Interactive section)

How do we write our own story problems?



There are 15 bugs on a leaf. Some more bugs landed on the leaf. There are now 22 bugs.

| | |
|--------------------|---|
| <p><u>Draw</u></p> | <p><u>Make Sense</u></p> <p>15 bugs more bugs come 22 total</p> |
|--------------------|---|

How many additional bugs landed on the leaf?

| | |
|--|---|
| <p><u>Strategies</u></p> $15 + \square = 22$ | <p><u>Words</u></p> <p>I drew 15 bugs. I added 7 more to get 22. 7 new bugs</p> |
|--|---|

| | |
|-------------------|--------------|
| <u>Strategies</u> | <u>Words</u> |
|-------------------|--------------|

| | |
|-------------|-------------------|
| <u>Draw</u> | <u>Make Sense</u> |
|-------------|-------------------|

| | |
|-------------------|--------------|
| <u>Strategies</u> | <u>Words</u> |
|-------------------|--------------|

| | |
|-------------|-------------------|
| <u>Draw</u> | <u>Make Sense</u> |
|-------------|-------------------|

Standards and Mathematical Practices

What we know about word problems

Inquiry

What we want to learn about word problems

1) We will use multiple strategies to persevere in solving story problems.

2) We will use pictures, numbers and words

(Bridges Unit 2)

UNIT PLANNING TOOL

Unit 3: Problem Solving

CCSSM:2.OA.1 Use + and - within 100 to solve

- One and two-step word problems:
- adding to
 - putting together
 - taking from
 - taking apart
 - comparing
- by using drawings and equations with a symbol for the unknown problem.

Math Practices being emphasized:

- 1) Make sense of problems and persevere in solving them.
- 3) Construct viable arguments and critique the reasoning of others.
- 4) Model with mathematics.

Essential Questions

- How do we solve word problems?
- How do we show our thinking so other people understand it?
- How do we write a story problem?

Pre and Post Assessments

Math riddles
picture count

Hungry ant picture #4

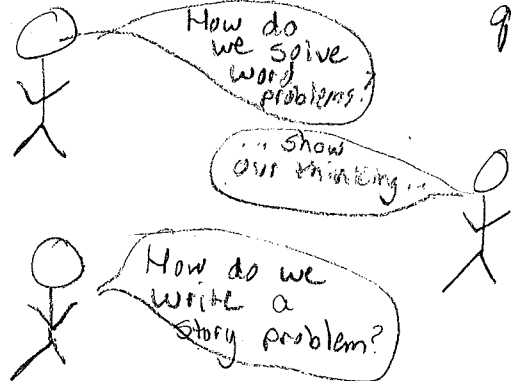
CFA #5

student written problems

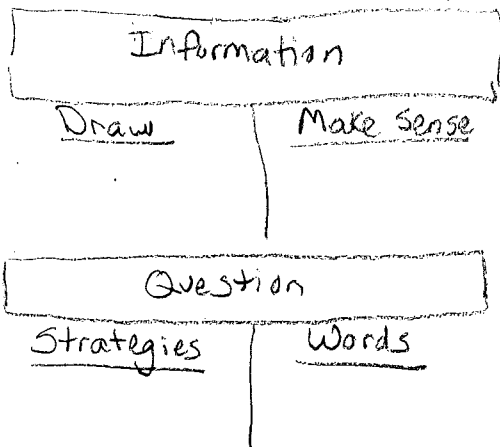
Key Concepts

- flexibility in using multiple strategies to solve problems by understanding the context
- communicating thinking using words, objects, pictures, and equations

Visual Models of Concepts - Essential Questions



Algorithms/Diagrams/Model




Connections (Real World Applications)

- Ant story problems grounded in information that students are studying
- giving example problems based on classroom data
'We have 22 sharp pencils. We need 30 pencils in all sharp. How many more do we need to sharpen?'

I drew _____ because _____, Language Functions/Structures Explain Describe ?
 You add _____ plus _____.
 I subtracted _____ minus _____, Why did you _____?
 Next I would _____.
 I _____ to find the answer.

| | | | |
|-----------------|-------------------|-------------------|-------------|
| Solution | add | <u>Vocabulary</u> | Subtract |
| answer | addend | | sum |
| equation | Count on | | |
| picture | Count back | | Strategies |
| model | Count up | | Communicate |
| Number sentence | difference | | |
| | repeated addition | | |

Focus and Motivation
 You Tube -  Solve Me Maybe - Elementary Math Problem Solving Steps
 Chants - Addition Bugaloo; Ants Here, Ants, There; Ant songs
 Literature - The Grapes of Wrath by Greg Tang (playing with language, math riddles, Fish School & Ant Attack)