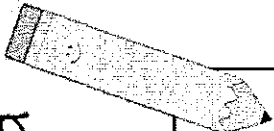


1. Make sense of problems and persevere in solving them.

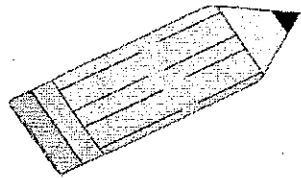


<p>PLAN</p> <ul style="list-style-type: none"> Understand the problem and plan out how to solve the problem 	<p>The problem is asking me to... I will _____ to solve the problem.</p>
<p>SOLVE IT</p> <ul style="list-style-type: none"> Work through the problem to solve it 	<p>Do I have to try something different or is this working?</p>
<p>CHECK IT</p> <ul style="list-style-type: none"> Check your answer. 	<p>Does your answer make sense?</p>

3. Construct viable arguments and critique the reasoning of others

Show how you got your answer.
Explain why you used those numbers.

Do this in a way that makes sense to others.

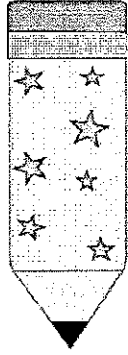


Communicate with your classmates using these sentence stems.

- I agree with _____ because _____.
- I do not understand. How did you get _____?
- I disagree with _____ because _____.
- Where is this part of the problem?
- Why is that true?

2.




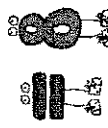
Reason abstractly and quantitatively.



use numbers and symbols out of context	use numbers and amounts in context
Examples	Examples
$4\text{¢} + \square = 82$	48 students went on the field trip
Properties and Operations	6 students stayed home
$48 - 6 = \square$	82 seats are in the theater
Base Ten Number System	

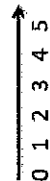
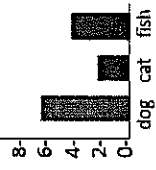
Model with Mathematics

4. write number sentences and equations for a given problem.



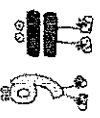

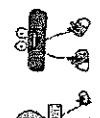
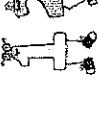





Create representations, tables, number lines, and graphs.

peanuts	nickels	dimes
2	3	1
3	2	5

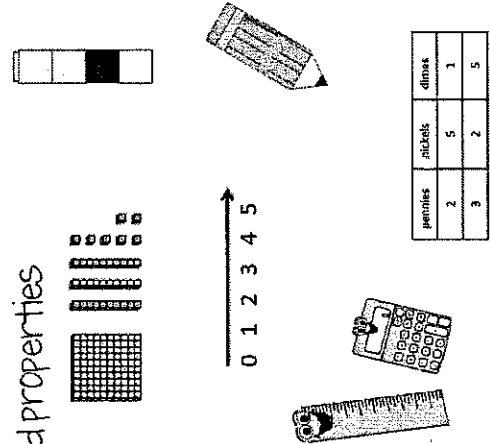
write problems for a given number sentence or equation.

5. Use appropriate tools strategically

I know what to use, how to use it and why I used the tools I used.

- Knowledge of numbers and properties
- Base Ten Blocks
- Unifix cubes
- Measuring tools
- Number lines
- Graph paper
- Drawings
- Tables
- Charts
- Organized lists
- Paper and pencil



6. Attend to Precision

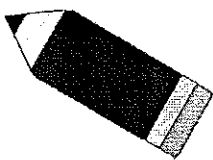
Use the correct:
Math symbols
Math Vocabulary
units of measure

Calculate correct answers.

Find an efficient (timesaving) way to find your answer.

Example:
 $25 + 23 =$
 $20 + 20 = 40$
 $5 + 3 = 8$
 $40 + 8 = 48$
 Instead of drawing 25 dots and then 23 more.

Example:
 Joshua had 5 cookies and ate 2. How many does he have left.
 $5 - 2 = 3$ Cookies



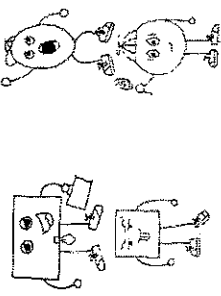
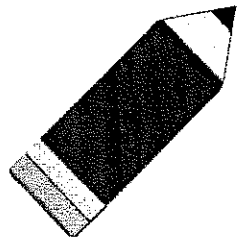
7. Look for and make use of structure

I can see and understand how numbers and spaces are organized and put together as parts and wholes.

Example:
 using Base 10 structure, Operations and properties
 $42 + 22 =$
 $42 + (2 \text{ tens} + 2) \rightarrow 42, 52, 62 + 2 = 64$

Example:
 using attributes to sort shapes
 • Number of sides
 • Number of angles

4 sides 4 angles 0 sides 0 angles



8. Look for and express regularity in repeated reasoning

• Noticing repeated calculations and strategies
 • Finding general methods and short cuts

Example:
 $3 \times 3 = 9$
 $3 \times 3 + 3 = 12$
 $5 \times 3 = 15$
 five 3s together = 5×3
 5×3 has the same product as 3×5 (Commutative Property)
 $3 \times 5 \rightarrow 5, 10, 15, = 15$

Example:
 using double facts
 $5 + 5 + 3 =$
 $10 + 3 = 13$

