1. Make Sense of Problems and Persevere in Solving Them.

I will keep trying!

I will explore other ways to solve the problem.

5. Check my answer and make sure my solution is reasonable.

4. Try my path & make changes if needed.

3. Choose a solution path.

2. Understand the question & predict a solution.

1. Read the problem carefully.

2. Reason Abstractly and Quantitatively.

I will…

- use math to represent situations.
- think about the size of quantities and the meaning of units.
- decontextualize and contextualize.

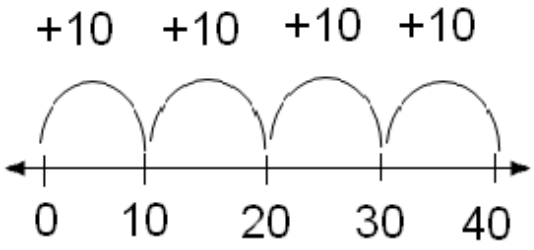
Decontextualize

take quantities out of context to work with them

2 + 3 = 5

Contextualize

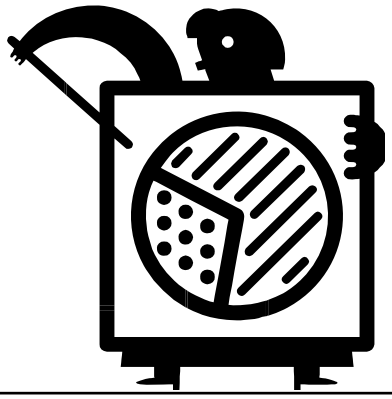
put quantities into context to see if they make sense



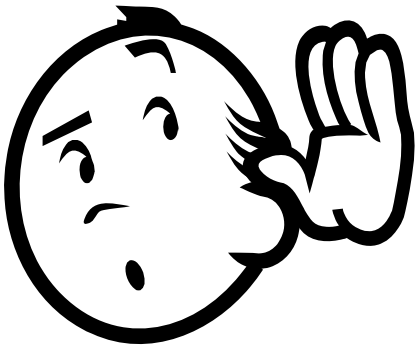
Sam had 4 bags of gum with 10 pieces in each. That's 40 pieces!

3. Construct Viable Arguments and Critique Reasoning of Others.

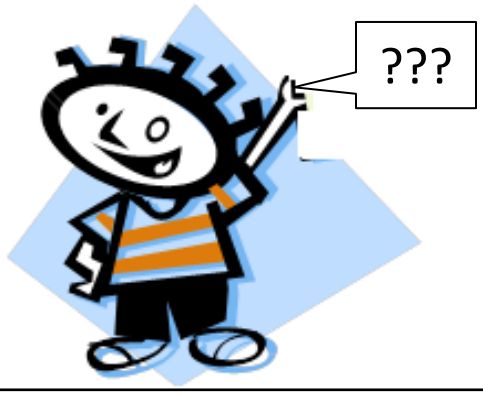
I will make and test conjectures.



I will explain and justify my thinking using words, objects, and drawings.



I will listen to other ideas and decide if they make sense.

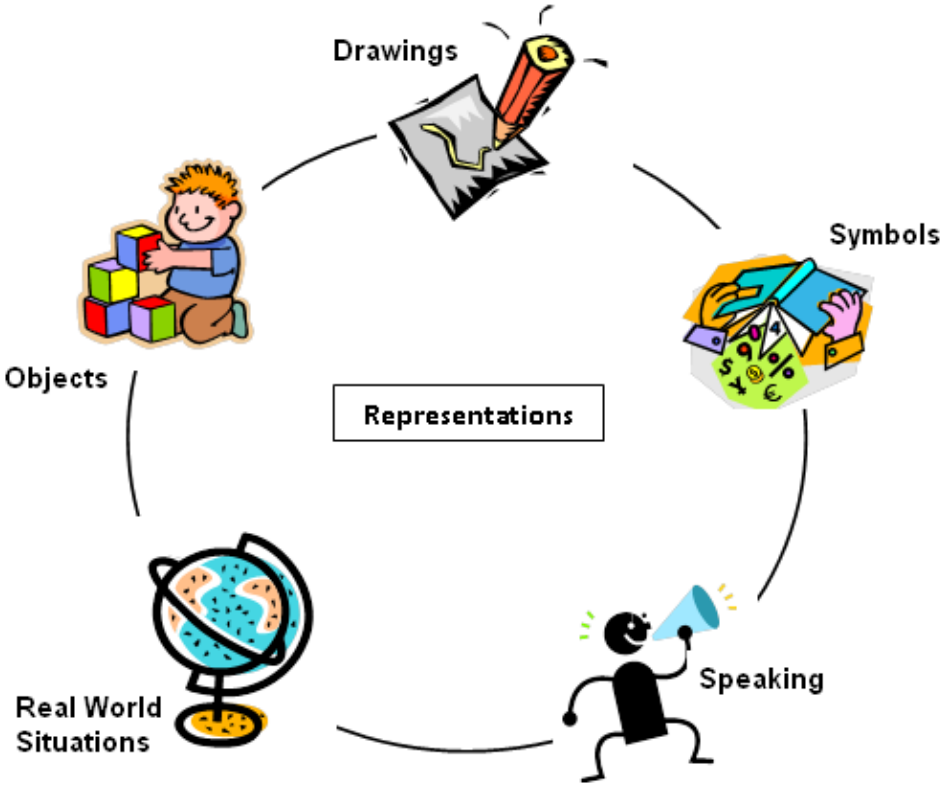


I will ask useful questions.

4. Model with Mathematics.

I will...

- use math to represent problems in my world.
- explain math situations using objects, drawings, symbols, equations and words.
- make connections between representations.
- check my answer and improve the model as needed.



5. Use Appropriate Tools Strategically.

I will...

- decide which tool will best help me solve the problem.
- estimate my answer before using a tool.
- compare my estimate to my answer and see if my tool was effective.

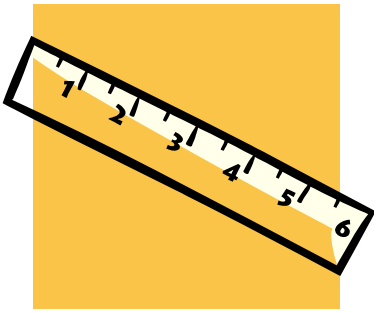
6. Attend to Precision.

I must be precise.

I will…

decide when to estimate or give an exact answer.

use units to give meaning to numbers.



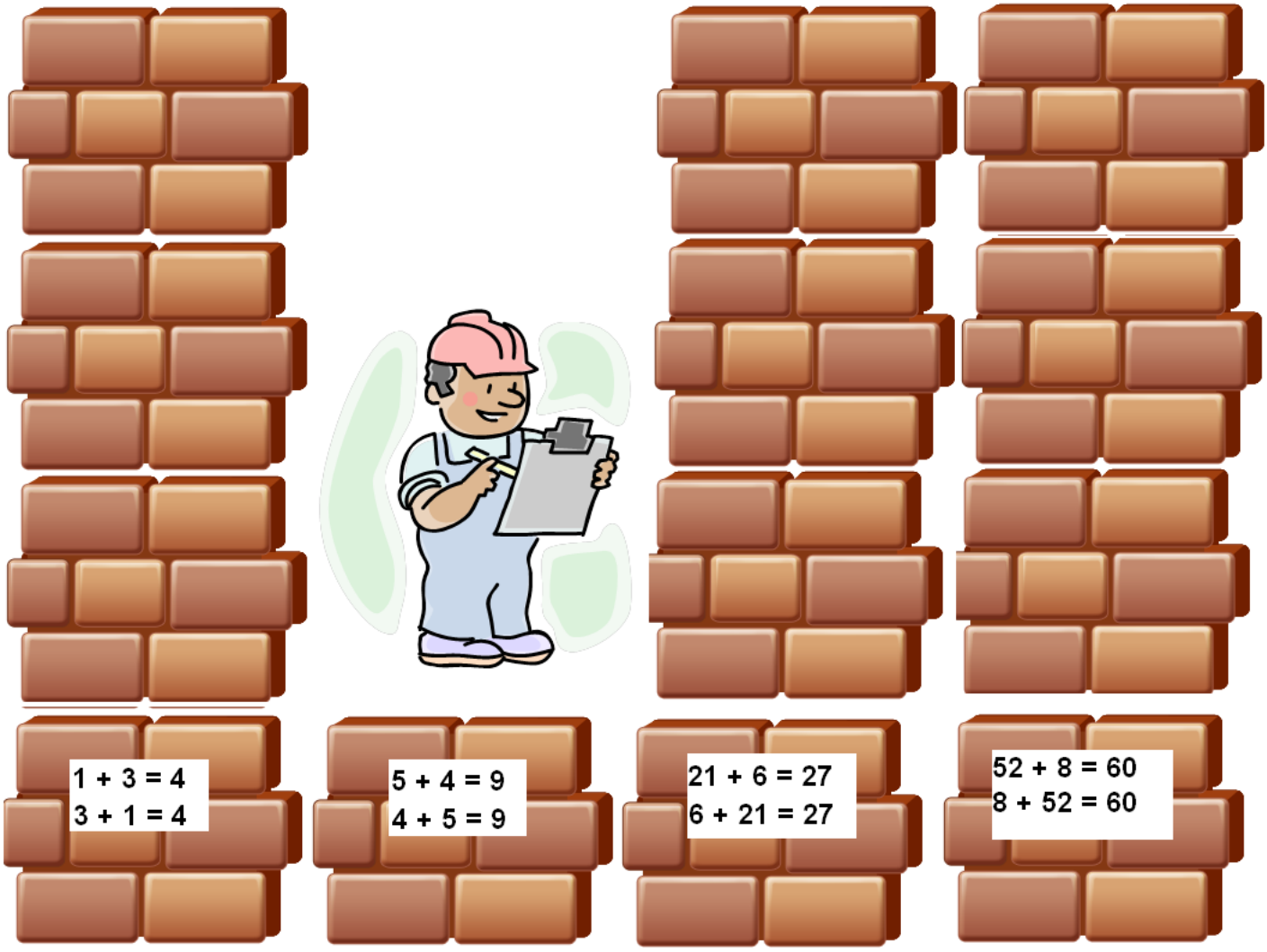
use appropriate vocabulary.

A rectangle has two sets of parallel lines.

7. Look for and Make Use of Structure.

I will...

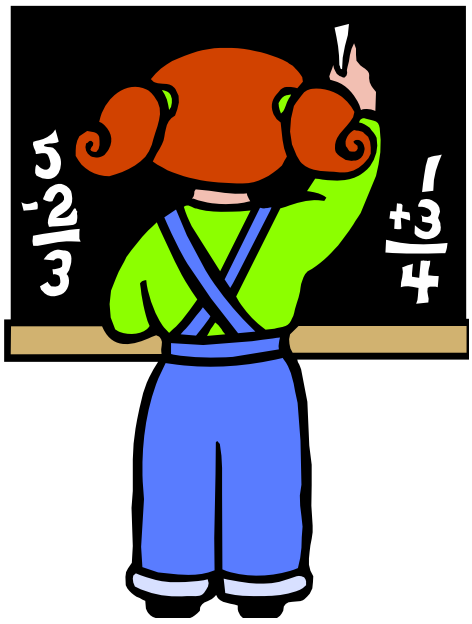
- find structure and patterns in numbers.
- use patterns to make rules about math.
- use my rules to help solve problems.



8. Look For and Express Regularity in Repeated Reasoning.

I will…

- look for patterns when working with numbers.
- observe when calculations are repeated.
- use my observations to take shortcuts.



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17			20
21			24	25	26			29	30
31	32	33	34	35		37	38	39	40
41	42	43	44	45		47	48	49	50
		53	54	55		57		59	60
61	62	63	64	65	66	67	68	69	
71	72	73	74	75	76	77	78	79	
							88	89	
91	92	93	94	95	96	97	98	99	

15 x 1 = 15

15 x 10 = 150

15 x 100 = 1500

15 x 1000 = ???