



# MATHEMATICAL PRACTICES

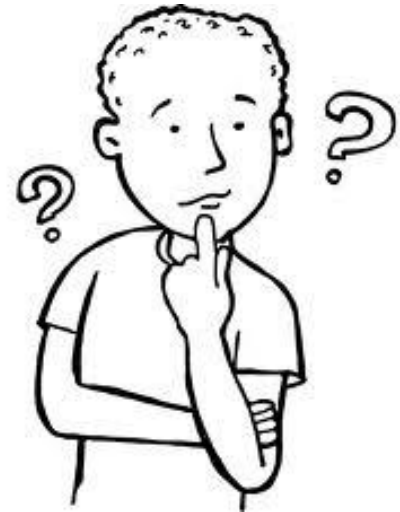
**Develop and use these  
important skills to help  
you be successful in  
math and in life!**

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

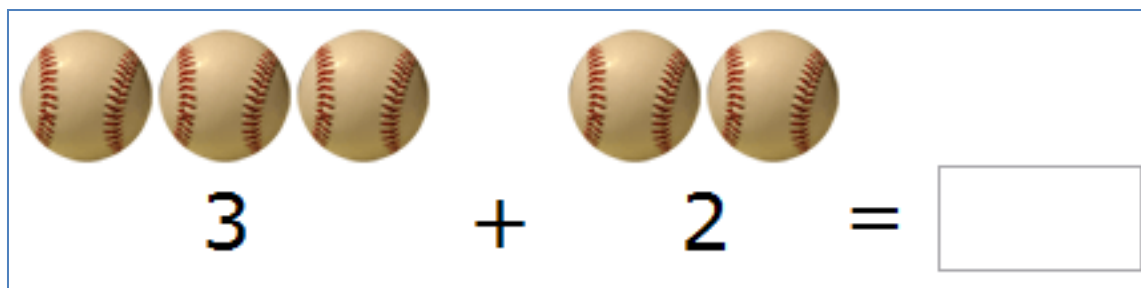


I am learning to:

- Make sense of problems
- Make a plan for solving problems
- Try different strategies, even when a problem is hard
- Solve a problem in more than one way
- Check whether a solution makes sense
- Find connections between mathematical ideas



## 2. Reason abstractly and quantitatively.



I am learning to:

- Represent problem situations with objects, pictures, numbers, words, and symbols
- Explain to others the meanings of objects, pictures, numbers, words, and symbols

# 3. Construct viable arguments and critique the reasoning of others.



I am learning to:

- Explain both what to do and why it works
- Make sense of others' mathematical thinking

# 4. Model with mathematics.



I am learning to:

- Solve real-world problems using mathematics
- Use models such as graphs, drawings, tables, symbols, and diagrams to solve problems

# 5. Use appropriate tools strategically.



I am learning to:

- Choose appropriate tools to solve problems
- Use mathematical tools correctly and efficiently
- Estimate an answer before using a tool

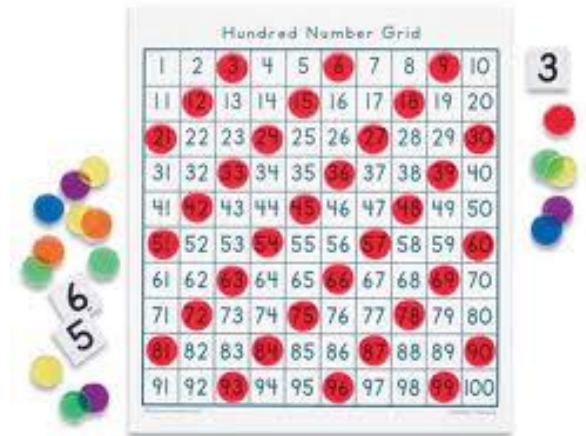
# 6. Attend to precision.



I am learning to:

- Clearly communicate my thinking to others
  - *Speak, Read, Write, and Listen* mathematically
- Decide whether an estimate or exact answer is needed
- Be accurate when I count, measure, and compute

# 7. Look for and make use of structure.



I am learning to:

- Notice, continue, and create patterns
- Use patterns to solve problems



# 8. Look for and express regularity in repeated reasoning.



A number line diagram illustrating the commutative property of addition. It shows a horizontal line with red dots representing numbers. Above the line, there are three red dots, followed by an equals sign, then two red dots, followed by another equals sign, then two red dots, followed by a plus sign, then three red dots. Below the line, the numbers 3, +, 2, =, 2, +, 3 are written. Below that, the number 5 is written under the first two dots, followed by an equals sign, followed by the number 5 under the last two dots.
$$3 + 2 = 2 + 3 = 5$$

I am learning to:

- Use patterns to create and explain rules and shortcuts
- Use rules and properties of number to more easily solve problems
- Reflect on my thinking before, during, and after solving a problem