

MATHEMATICAL PRACTICES

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

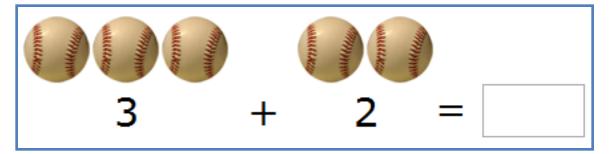
Heather Canzurlo, Parma City School District

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

- 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.

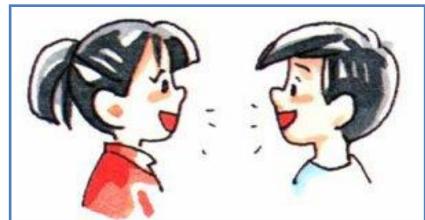




- Represent problem situations with objects, pictures, numbers, words, and symbols
- Explain to others the meanings of objects, pictures, numbers, words, and symbols

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





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

4. Model with mathematics.





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

5. Use appropriate tools strategically.



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

6. Attend to precision.

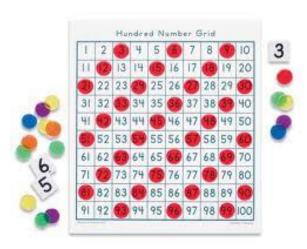




- Clearly communicate my thinking to others
 Speak, Read, Write, and Listen mathematically
- Decide whether an estimate or exact answer is needed
- Be accurate when I count, measure, and compute

7. Look for and make use of structure.





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

8. Look for and express regularity in repeated reasoning.



- 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