

Teacher: _____

Date: _____

Standards for Mathematical Practice: Fifth Grade

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

- Students solve problems by applying their understanding of operations with whole numbers, decimals, and fractions.
- Students seek the meaning of a problem and look for efficient ways to represent and solve it.
- Can reexamine the task in a different way.
- Are expected to persevere while solving tasks.
- Listen to the strategies of others.

2. Reason abstractly and quantitatively.

- Students recognize that a number represents a specific quantity.
- They extend this understanding from whole numbers to fractions and decimals.
- Students can decontextualize by taking a real-world problem and writing and solving equations based on the word problem.
- Students write simple expressions, record calculations with numbers, and round numbers using place value.

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

- Students can construct arguments using representations such as objects or drawings.
- Students can constructively critique the strategies and reasoning of their classmates.
- What do you think about what ____ said?
- Can you explain why his/her strategy worked?

4. Model with mathematics.

- Students represent problem situations in various ways.
- Can evaluate their results in the context of the situation and reflect on whether the results make sense.
- Students evaluate the utility of models to determine which models are most useful and efficient to solve problems.

5. Use appropriate tools strategically.

- Students consider the available tools (including estimation) when solving a math problem.
- Students are able to determine their appropriate use.
- How did using the tool help you solve the problem?

6. Attend to precision

- Students are precise in their communication, calculations, and measurements.
- They use appropriate terminology when referring to expressions, fractions, geometric figures, and coordinate grids.
- Students check their work for accuracy.
- Can you tell me why that is true?

7. Look for and make use of structure.

- Students closely examine numbers to discover a pattern or structure.
- Students examine numerical patterns and relate them to a rule or a graphical representation.
- How do you know your rule will work?

8. Look for and express regularity in repeated reasoning.

- Students use repeated reasoning to understand algorithms and make generalizations about patterns.
- Students explore operations with fractions with visual models and begin to form generalizations.
- Students use models to examine patterns and generate their own algorithms.