

Idaho Core Math Standards: FIFTH GRADE Quick Guide

This is a one page “big picture” overview. We use the Pearson Envisions and Investigations Math programs.

Essential Skills:

Operations and Algebraic Thinking:

- Write and interpret numerical expressions.
- Analyze patterns and relationships.

Number and Operations in Base Ten:

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number and Operations--Fractions:

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data:

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric Measurement: understand concepts of volume and relate volume to multiplication and to addition.

Geometry:

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

Mathematical Practices

1. **Make sense of problems and persevere in solving them.**
2. **Reason abstractly and quantitatively.**
3. **Construct viable arguments and critique the reasoning of others.**
4. **Model with mathematics.**
5. **Use appropriate tools strategically.**
6. **Attend to precision.**
7. **Look for and make use of structure.**
8. **Look for and express regularity in repeated reasoning.**

“Must Haves” in preparation for Sixth Grade*:

By the end of the year, all students will be able to:

1. Read, write and compare decimals to thousandths.
2. Fluently multiply multi-digit whole numbers using the standard algorithm.
3. Find whole-number quotients of whole numbers with up to four digit dividends and two-digit divisors.
4. Add, subtract, multiply, and divide fractions including mixed numbers.



Core Standards Vocabulary

(Review fourth grade list—attached)

Operations and Algebraic Thinking

Parentheses, brackets, braces
Numerical expressions
Numerical patterns
Ordered pairs
Coordinate plane

Number and Operations in Base 10

Powers of ten
Whole-number exponents
Rounding of decimals to thousandths
Algorithm
Multi-digit whole numbers
Quotients
Dividends
Divisors
Rectangular arrays
Area models
Properties of operations

Number and Operations--Fractions

Equivalent fractions
Visual Fraction model
Area of a rectangle
Fractional side lengths
Fraction products
Division of a unit fraction
Non-zero whole number

Measurement and Data

Conversion
Line plot
Data set of measurements
Volume
Unit cube; one cubic unit
Right rectangular prism

Geometry

Perpendicular number lines
Axes (x-axis; y-axis)
Coordinate plane
Coordinate system (x-coordinate; y-coordinate)
Intersection of lines
Origin
Plane
Quadrant
Coordinate values of points
Classify two dimensional figures using hierarchy of properties

*“Must Haves” represent the most critical numeric requirements needed to advance to the next grade. Much more instruction and learning is required and outlined in the standards.