Idaho Core Math Standards: THIRD GRADE Quick Guide

This is a one page "big picture" overview. We use the Pearson Investigations Math program.

Essential Skills:

Operations and Algebraic Thinking:

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations in Base Ten:

- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations--Fractions:

- Develop understanding of fractions as numbers.

Measurement and Data:

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric Measurement: understand concepts of area and relate area to multiplication and addition.
- Geometric Measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry:

- Reason with shapes and their attributes.

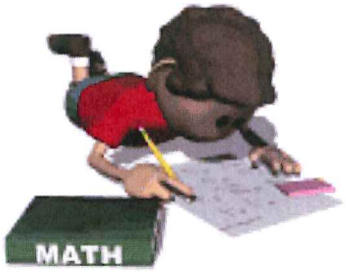
Mathematical Practices

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 Fourth Grade*:

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

1. **Fluently** multiply and divide within one hundred.
2. **Know from memory** all products of two one-digit numbers, demonstrated by 25 in a minute.



*"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.

Core Standards Vocabulary

(Review second grade list—attached)

Operations and Algebraic Thinking

Products
Whole numbers
Quotients
Equal groups
Arrays
Equations
Unknown whole numbers
Properties of operations
Commutative property of multiplication
Associative property of multiplication
Distributive property
The four operations
Mental computation
Estimation strategies
Rounding
Arithmetic patterns
Composing numbers
Decomposing numbers

Number and Operations in Base 10

Algorithms
Multiples

Number and Operations--Fractions

Fractions
Number line diagram
Interval
Endpoint
Equivalent fractions
Numerator
Denominator

Measurement and Data
Time intervals
Liquid volumes
Masses of objects
Estimation
Grams, kilograms, liters
Picture graph
Bar graph
Appropriate units; i.e., whole numbers, halves, quarters
Area
Plane figures
Square unit
Unit squares; i.e., square cm, square in.
Perimeter
Polygon

Geometry
Attribute
Rhombuses
Quadrilaterals
Unit fraction of a whole
Partition