Fourth Grade Mathematics

Refer to the Utah State Mathematics Standards for more detail

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

Operations and Algebraic Thinking

a. Use the four operations with whole numbers (addition & subtraction- within 1,000,000; multiplication- 4 digits by 1 digit or 2 digits by 2 digits; division up to 4 digits by 1 digit) to solve problems.
b. Gain familiarity with factors and multiples.
c. Generate and analyze numeric and shape patterns.

Number and Operations in Base Ten

a. Generalize place value understanding for multi-digit whole numbers within 1,000,000 by analyzing patterns, writing whole numbers in a variety of ways, making comparisons, and rounding.
b. Use place value understanding and properties of operations to perform multi-digit addition and subtraction, within 1,000,000; multiplication- 4 digits by 1 digit or 2 digits by 2 digits; division- up to 4 digits by a 1 digit divisor.

Number and Operations- Fractions

a. Extend understanding of equivalence and ordering of fractions.
b. Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.
c. Understand decimal notation to the hundredths and compare decimal fractions with denominators of 10 and 100.
Measurement and Data

a. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
b. Apply knowledge of area and perimeter to solve real-world and mathematical problems.
c. Represent and interpret data through the use of a line plot.
d. Understand various concepts of angles and angle measurement.

Geometry

a. Draw and identify lines and angles, as well as classify shapes by properties of their lines and angles.