

# Resources in Mathematics:

## Fundamental Grade 4 Mathematics



### Key Concept

- The fundamental mathematics concepts developed in K-5 serve as the building blocks that prepare students for learning more advanced mathematics concepts.

#### Where They've Been:

3

- Represent & solve problems involving multiplication and division
- Understand properties of multiplication and the relationship between multiplication and division
- Multiply & divide within 100
- Solve problems involving the four operations, and identify & explain patterns in arithmetic
- Develop understanding of fractions as numbers
- Solve problems involving measurement and estimation of intervals of time, liquid volumes, & masses of objects
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition

#### Where They Are:

4

- Use the four operations with whole numbers to solve problems
- Generalize place value understanding for multi-digit whole numbers
- Use place value understanding and properties of operations to perform multidigit arithmetic
- Extend understanding of fraction equivalence and ordering
- Build fractions from unit fractions by applying and extending previous understandings of operations
- Understand decimal notation for fractions, and compare decimal fractions

#### Where They're Going:

5

- Understand the place value system
- Perform operations with multi-digit whole numbers and decimals to hundredths
- 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
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition
- Graph points in the coordinate plane to solve real-world and mathematical problems

# Resources in Mathematics: Fundamental Grade 4 Mathematics



- These are key areas of focus in the standards for building students' foundational math skills.
- Some topics in each grade require more focus because they are more challenging and important for future success in fundamental mathematics. However, all content is important, and skipping any areas can create learning gaps that affect students later.

## Major Focuses within Grade 4

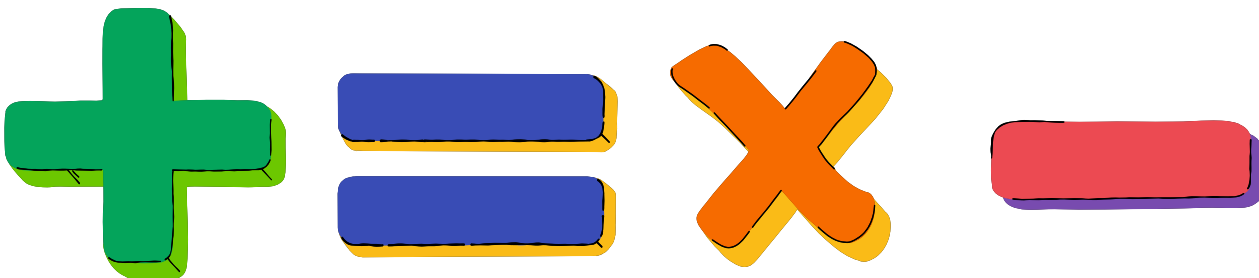
- Use the four operations with whole numbers to solve problems.
- Generalize place value understanding for multi-digit whole numbers.
- Use place value understanding and properties of operations to perform multi-digit arithmetic.
- Extend understanding of fraction equivalence and ordering.
- Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
- Understand decimal notation for fractions, and compare decimal fractions.

## Supporting Focuses within Grade 4

- Gain familiarity with factors and multiples
- Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
- Represent and interpret data.

## Additional Focuses within Grade 4

- Generate and analyze patterns.
- Geometric measurement: understand concepts of angle and measure angles.
- Draw and identify lines and angles, and classify shapes by properties of their lines and angles.



Citation

Student Achievement Partners. (2014, November 12). *SAP Focus Math K–8* [PDF]. Achieve the Core. <https://achievethecore.org/content/upload/SAP%20Focus%20Math%20K%20%28%938%2011.12.14.pdf>