

# Resources in Mathematics:

## Fundamental Grade 5 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:

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- 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 Are:

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- 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

#### Where They're Going:

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- Apply and extend previous understandings of multiplication and division to divide fractions by fractions
- Apply and extend previous understandings of numbers to the system of rational numbers
- Understand ratio concepts and use ratio reasoning to solve problems
- Apply and extend previous understandings of arithmetic to algebraic expressions
- Reason about and solve one-variable equations and inequalities
- Represent and analyze quantitative relationships between dependent and independent variables

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- 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 5

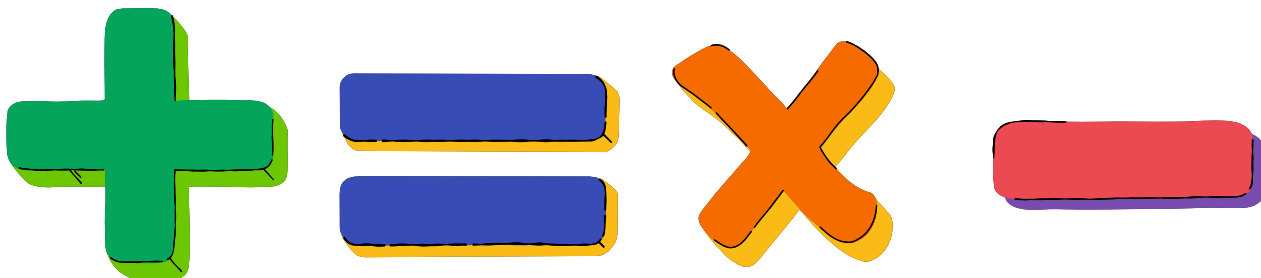
- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.
- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

### Supporting Focuses within Grade 5

- Convert like measurement units within a given measurement system.
- Represent and interpret data.

### Additional Focuses within Grade 5

- Write and interpret numerical expressions.
- Analyze patterns and relationships.
- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.



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%E2%80%938%2011.12.14.pdf>