

CURRICULUM OVERVIEW

ELEMENTARY MATHEMATICS

Kindergarten through Grade 5

Build meaning through models, language, and strategy.

Students develop number sense, connect operations to meaning, and explain how they solve problems. Topics progress from counting and shapes to fractions, decimals, measurement, and coordinate reasoning, with grade-specific skills organized for easy reference.

IN THIS OVERVIEW

01 Kindergarten

02 Grade 1

03 Grade 2

04 Grade 3

05 Grade 4

06 Grade 5

A topic overview, not a fixed lesson sequence. Instructional priorities are shaped by student needs and program goals.

TOPICS AND SKILLS

Kindergarten

Counting and Cardinality

K.CC

Know number names and the count sequence.
Compare numbers.

Operations and Algebraic Thinking

K.OA

Understand addition and subtraction.

Number and Operations in Base Ten

K.NBT

Work with numbers 11-19.

Measurement and Data

K.MD

Describe and compare measurable attributes.
Classify objects and count the number of objects.

Geometry

K.G

Identify and describe shapes. Analyze, compare, create, and compose shapes.

Grade 1

Operations and Algebraic Thinking

1.OA

Represent and solve problems involving addition and subtraction. Understand and apply properties of operations. Add and subtract within 20. Work with addition and subtraction equations.

Number and Operations in Base Ten

1.NBT

Extend the counting sequence. Understand place value. Use place value understanding and properties of operations to add and subtract.

Measurement and Data

1.MD

Measure lengths indirectly and by iterating length units. Tell and write time. Represent and interpret data.

Geometry

1.G

Reason with shapes and their attributes.

TOPICS AND SKILLS

Grade 2

Operations and Algebraic Thinking

2.OA

Represent and solve problems involving addition and subtraction. Add and subtract within 20. Work with equal groups of objects to gain foundations for multiplication.

Number and Operations in Base Ten

2.NBT

Understand place value. Use place value understanding and properties of operations to add and subtract.

Measurement and Data

2.MD

Measure and estimate lengths in standard units. Relate addition and subtraction to length. Work with time and money. Represent and interpret data.

Geometry

2.G

Reason with shapes and their attributes.

Grade 3

Operations and Algebraic Thinking

3.OA

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

3.NBT

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

Number and Operations - Fractions

3.NF

Develop understanding of fractions as numbers.

Measurement and Data

3.MD

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 to addition. Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry

3.G

Reason with shapes and their attributes.

TOPICS AND SKILLS

Grade 4

Operations and Algebraic Thinking

4.OA

Use the four operations with whole numbers to solve problems. Gain familiarity with factors and multiples. Generate and analyze patterns.

Number and Operations in Base Ten

4.NBT

Generalize place value understanding for multi-digit whole numbers. Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations - Fractions

4.NF

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.

Measurement and Data

4.MD

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. Represent and interpret data. Geometric measurement: understand concepts of angle and measure angles.

Geometry

4.G

Draw and identify lines and angles, and classify shapes by the properties of their lines and angles.

Grade 5

Operations and Algebraic Thinking

5.OA

Write and interpret numerical expressions. Analyze patterns and relationships.

Number and Operations in Base Ten

5.NBT

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

Number and Operations - Fractions

5.NF

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

5.MD

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

5.G

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