

Standards for Mathematical Practice

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

1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
 - Unit 6: Operations and Problem Solving
 - Unit 7: Algebra, Patterns, and Coordinate Graphs
2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.
 - Unit 7: Algebra, Patterns, and Coordinate Graphs
3. Generate two numerical patterns using two given rules.
 - Unit 7: Algebra, Patterns, and Coordinate Graphs

Number & Operations in Base Ten

1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.
 - Unit 2: Addition and subtraction with Decimals
 - Unit 4: Multiplication with Whole Numbers and Decimals
2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10
 - Unit 4: Multiplication with Whole Numbers and Decimals
 - Unit 5: Division with Whole Numbers and Decimals
3. Read, write, and compare decimals to thousandths.
 - Unit 2: Addition and subtraction with Decimals
 - Unit 4: Multiplication with Whole Numbers and Decimals
4. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
 - Unit 2: Addition and subtraction with Decimals
 - Unit 4: Multiplication with Whole Numbers and Decimals
 - Unit 5: Division with Whole Numbers and Decimals
5. Use place value understanding to round decimals to any place.
 - Unit 2: Addition and subtraction with Decimals
 - Unit 4: Multiplication with Whole Numbers and Decimals
 - Unit 6: Operations and Problem Solving
6. Fluently multiply multi-digit whole numbers using the standard algorithm.

- Unit 4: Multiplication with Whole Numbers and Decimals
 - Unit 5: Division with Whole Numbers and Decimals
 - Unit 6: Operations and Problem Solving
7. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.
 - Unit 5: Division with Whole Numbers and Decimals
 - Unit 6: Operations and Problem Solving
 8. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction
 - Unit 2: Addition and subtraction with Decimals
 - Unit 4: Multiplication with Whole Numbers and Decimals
 - Unit 5: Division with Whole Numbers and Decimals
 - Unit 6: Operations and Problem Solving

Number & Operations—Fractions

1. Add and subtract fractions with unlike denominators.
 - Unit 1: Addition and Subtraction with Fractions
 - Unit 3: Multiplication and Division with Fractions
 - Unit 6: Operations and Problem Solving
2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators
 - Unit 1: Addition and Subtraction with Fractions
 - Unit 3: Multiplication and Division with Fractions
 - Unit 6: Operations and Problem Solving
3. Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers.
 - Unit 3: Multiplication and Division with Fractions
 - Unit 6: Operations and Problem Solving
4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
 - Unit 3: Multiplication and Division with Fractions
 - Unit 6: Operations and Problem Solving
 - Unit 8: Measurement and Data
5. Interpret multiplication as scaling.
 - Unit 3: Multiplication and Division with Fractions
 - Unit 4: Multiplication with Whole Numbers and Decimals
 - Unit 5: Division with Whole Numbers and Decimals
 - Unit 6: Operations and Problem Solving
6. Solve real world problems involving multiplication of fractions and mixed numbers.
 - Unit 3: Multiplication and Division with Fractions
 - Unit 6: Operations and Problem Solving
7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.
 - Unit 3: Multiplication and Division with Fractions
 - Unit 6: Operations and Problem Solving

Measurement & Data

1. Convert among different-sized standard measurement units within a given measurement system
 - Unit 2: Addition and subtraction with Decimals
 - Unit 8: Measurement and Data
2. Make a line plot to display a data set of measurements in fractions of a unit.
 - Unit 1: Addition and Subtraction with Fractions
 - Unit 3: Multiplication and Division with Fractions
 - Unit 8: Measurement and Data
3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
 - Unit 8: Measurement and Data
4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
 - Unit 8: Measurement and Data
5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
 - Unit 8: Measurement and Data

Geometry

1. Use a pair of perpendicular number lines, called axes, to define a coordinate system.
 - Unit 7: Algebra, Patterns, and Coordinate Graphs
2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane.
 - Unit 7: Algebra, Patterns, and Coordinate Graphs
3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
 - Unit 8: Measurement and Data
4. Classify two-dimensional figures in a hierarchy based on properties.
 - Unit 8: Measurement and Data