



Critical Areas	Domains	Clusters
Developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends	4.OA Operations and Algebraic Thinking	<p>Use the four operations with whole numbers to solve problems. Standards: 4.OA.1, 4.OA.2, 4.OA.3</p> <p>Gain familiarity with factors and multiples. Standard: 4.OA.4</p> <p>Generate and analyze patterns. Standard: 4.OA.5</p>
	4.NBT Number and Operations in Base Ten	<p>Generalize place value understanding for multi-digit whole numbers. Standards: 4.NBT.1, 4.NBT.2, 4.NBT.3</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic. Standards: 4.NBT.4, 4.NBT.5, 4.NBT.6</p>
Developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers	4.NF Number and Operations—Fractions	<p>Extend understanding of fraction equivalence and ordering. Standards: 4.NF.1, 4.NF.2</p> <p>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. Standards: 4.NF.3, 4.NF.4</p> <p>Understand decimal notation for fractions, and compare decimal fractions. Standards: 4.NF.5, 4.NF.6, 4.NF.7</p>
Understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry	4.MD Measurement and Data	<p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. Standards: 4.MD.1, 4.MD.2, 4.MD.3</p> <p>Represent and interpret data. Standard: 4.MD.4</p> <p>Geometric measurement: understand concepts of angle and measure angles. Standards: 4.MD.5, 4.MD.6, 4.MD.7</p>
	4.G Geometry	<p>Draw and identify lines and angles, and classify shapes by properties of their lines and angles. Standards: 4.G.1, 4.G.2, 4.G.3</p>

The alignment of Critical Areas with Domains and Clusters is not straightforward in some cases. This chart shows one interpretation for Grade 4.

Grade 4 Topics	Grade 4 Big Ideas
<p>Topic 1 Multiplication and Division: Meanings and Facts</p> <p>Topic 2 Generate and Analyze Patterns</p>	<ul style="list-style-type: none"> • Basic Facts and Algorithms • Operation Meanings and Relationships • Patterns, Relations, and Functions • Properties • Variable • Practices, Processes, and Proficiencies
<p>Topic 3 Place Value</p> <p>Topic 4 Addition and Subtraction of Whole Numbers</p> <p>Topic 5 Number Sense: Multiplying by 1-Digit Numbers</p> <p>Topic 6 Developing Fluency: Multiplying by 1-Digit Numbers</p> <p>Topic 7 Number Sense: Multiplying by 2-Digit Numbers</p> <p>Topic 8 Developing Fluency: Multiplying by 2-Digit Numbers</p> <p>Topic 9 Number Sense: Dividing by 1-Digit Divisors</p> <p>Topic 10 Developing Fluency: Dividing by 1-Digit Divisors</p>	<ul style="list-style-type: none"> • Basic Facts and Algorithms • The Base-Ten Numeration System • Comparison and Relationships • Equivalence • Estimation • Operation Meanings and Relationships • Patterns, Relations, and Functions • Practices, Processes, and Proficiencies
<p>Topic 11 Fraction Equivalence and Ordering</p> <p>Topic 12 Adding and Subtracting Fractions and Mixed Numbers with Like Denominators</p> <p>Topic 13 Extending Fraction Concepts</p>	<ul style="list-style-type: none"> • Basic Facts and Algorithms • The Base-Ten Numeration System • Comparison and Relationships • Equivalence • Number Uses, Classification, and Representation • Numbers and the Number Line • Operation Meanings and Relationships • Practices, Processes, and Proficiencies
<p>Topic 14 Measurement Units and Conversions</p> <p>Topic 15 Solving Measurement Problems</p>	<ul style="list-style-type: none"> • Data Collection and Representation • Estimation • Measurement • Patterns, Relations, and Functions • Practices, Processes, and Proficiencies
<p>Topic 16 Lines, Angles, and Shapes</p>	<ul style="list-style-type: none"> • Geometric Figures • Measurement • Practices, Processes, and Proficiencies

