

Grade 4 Mathematics Year At-A-Glance

How can we use mathematics to organize and make sense of our world? Students in fourth grade begin to leverage their understanding of number relationships by organizing and reasoning mathematically through a variety of contextual problems using multiple representations to justify their thinking. Students are given the time to explore and develop connections between fractions and decimals.

<u>Quarter 1</u>	Unit 0: Building a Mathematical Community Through the Data Cycle (about 9 days)	Unit 1: Place Value, Addition, and Subtraction of Whole Numbers (about 14 days)	Unit 2: Multiplication and Division (about 26 days)	
<u>Quarter 2</u>	Unit 3: Fraction Number Sense & Computation and Probability (about 34 days)		Begin Unit 4: Data (about 8 days)	
<u>Quarter 3</u>	Complete Unit 4: Data (about 2 days)	Unit 5: Decimal Number Sense and Computation (about 17 days)	Unit 6: Measurement (about 18 days)	Begin Unit 7: Geometry (about 5 days)
<u>Quarter 4</u>	Complete Unit 7: Geometry (about 14 days)		SOL Review & Post SOL Reteaching (about 32 days)	

* On the state assessment, items measuring this objective are assessed without the use of a calculator.

** 4.CE.2b should be addressed throughout the year.

Quarter 1	Unit	Suggested Time	Standards of Learning
Quarter 1	<u>Unit 0:</u> <u>Building a Mathematical Community Through the Data Cycle</u>	About 9 days	4.PS.1 The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on line graphs.
	<u>Unit 1:</u> <u>Place Value, Addition, and Subtraction of Whole Numbers</u>	About 14 days	4.NS.1 The student will use place value understanding to read, write, and identify the place and value of each digit in a nine-digit whole number. 4.NS.2 The student will demonstrate an understanding of the base 10 system to compare and order whole numbers up to seven digits. 4.CE.1 The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction with whole numbers.
	<u>Unit 2:</u> <u>Multiplication and Division</u>	About 26 days	4.CE.2 The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using multiplication with whole numbers, and single-step problems, including those in context, using division with whole numbers; and recall with automaticity the multiplication facts through 12×12 and the corresponding division facts. [except e, f]

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Quarter 2	Unit	Suggested Time	Standards of Learning
Quarter 2	<u>Unit 3:</u> <u>Fraction</u> <u>Number</u> <u>Sense &</u> <u>Computation</u> <u>and</u> <u>Probability</u>	About 34 days	<p>4.NS.3 The student will use mathematical reasoning and justification to represent, compare, and order fractions (proper, improper, and mixed numbers with denominators 12 or less), with and without models.</p> <p>4.CE.2 The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using multiplication with whole numbers, and single-step problems, including those in context, using division with whole numbers; and recall with automaticity the multiplication facts through 12×12 and the corresponding division facts.[only e, f]</p> <p>4.CE.3 The student will estimate, represent, solve, and justify solutions to single-step problems, including those in context, using addition and subtraction of fractions (proper, improper, and mixed numbers with like denominators of 2, 3, 4, 5, 6, 8, 10, and 12), with and without models; and solve single-step contextual problems involving multiplication of a whole number (12 or less) and a unit fraction, with models.</p> <p>4.PS.2 The student will model and determine the probability of an outcome of a simple event.</p>
	<u>Begin Unit 4:</u> <u>Data</u>	About 12 days	<p>4.MG.2 The student will solve single-step and multistep contextual problems involving elapsed time (limited to hours and minutes within a 12-hour period).</p> <p>4.PS.1 The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on line graphs.</p>

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Quarter 3	Unit	Suggested Time	Standards of Learning
	<u>Complete Unit 4: Data</u>	About 2 days	<p>4.MG.2 The student will solve single-step and multistep contextual problems involving elapsed time (limited to hours and minutes within a 12-hour period).</p> <p>4.PS.1 The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on line graphs.</p>
	<u>Unit 5: Decimal Number Sense and Computation</u>	About 17 days	<p>4.NS.4 The student will use mathematical reasoning and justification to represent, compare, and order decimals through thousandths, with and without models.</p> <p>4.NS.5 The student will reason about the relationship between fractions and decimals (limited to halves, fourths, fifths, tenths, and hundredths) to identify and represent equivalencies.</p> <p>4.CE.4 The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction of decimals through the thousandths, with and without models.</p>
Quarter 3	<u>Unit 6: Measurement and Patterns</u>	About 18 days	<p>4.MG.1 The student will reason mathematically to solve problems, including those in context, that involve length, weight/mass, and liquid volume using U.S. Customary and metric units.</p> <p>4.MG.3 The student will use multiple representations to develop and use formulas to solve problems, including those in context, involving area and perimeter limited to rectangles and squares (in both U.S. Customary and metric units).</p> <p>4.PFA.1 The student will identify, describe, extend, and create increasing and decreasing patterns (limited to addition, subtraction, and multiplication of whole numbers), including those in context, using various representations.</p>
	<u>Begin Unit 7: Geometry</u>	About 5 days	<p>4.MG.4 The student will identify, describe, and draw points, rays, line segments, angles, and lines, including intersecting, parallel, and perpendicular lines.</p> <p>4.MG.5 The student will classify and describe quadrilaterals (parallelograms, rectangles, squares, rhombi, and/or trapezoids) using specific properties and attributes.</p> <p>4.MG.6 The student will identify, describe, compare, and contrast plane and solid figures according to their characteristics (number of angles, vertices, edges, and the number and shape of faces), with and without models.</p>

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Quarter 4	Unit	Suggested Time	Standards of Learning
Quarter 4	<u>Complete Unit 7: Geometry</u>	About 14 days	<p>4.MG.4 The student will identify, describe, and draw points, rays, line segments, angles, and lines, including intersecting, parallel, and perpendicular lines.</p> <p>4.MG.5 The student will classify and describe quadrilaterals (parallelograms, rectangles, squares, rhombi, and/or trapezoids) using specific properties and attributes.</p> <p>4.MG.6 The student will identify, describe, compare, and contrast plane and solid figures according to their characteristics (number of angles, vertices, edges, and the number and shape of faces), with and without models.</p>
Quarter 4	<u>SOL Review & Post SOL Reteaching</u>	About 32 days	<p>This guide provides critical resources and clear guidance to support teachers and support staff as they plan within their CLTs to prepare students for the Spring 2026 SOL Test administration. It offers detailed insights and resources that provide high-yield content and skill reviews, enabling teachers to tailor limited instructional time effectively. By addressing knowledge gaps and reinforcing key concepts we support our shared focus of meeting the Wildly Important Goals (WIGs) set forth as a part of our strategic plan.</p>

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