

Mathematics Grade 4  
Year at a Glance

Unit	Duration	Assessed Standards	Big Ideas	Essential Questions	End of Unit Assessment
<b>Unit 1:</b> Place Value/Adding and Subtracting	<b>24 days</b>	4.NBT.A.1 4.NBT.A.2 4.NBT.A.3 4.NBT.B.4 4.OA.A.3 *5.NBT.A.1 *5.NBT.A.2	<ul style="list-style-type: none"> <li>The number system is a well-defined structure based on groups of ten.</li> <li>Computational fluency requires efficient, accurate, and flexible methods for computing.</li> <li>Mental math and estimation serve as tools for judging reasonableness of computations.</li> </ul>	<ul style="list-style-type: none"> <li><i>How can decomposing numbers help with mental addition and subtraction?</i></li> <li><i>How does understanding the structure of our number system help with computation, estimation, and comparison of numbers?</i></li> <li><i>Why is it important to estimate?</i></li> </ul>	<ul style="list-style-type: none"> <li>Part I - Periodic/Unit Assessment (multiple choice and multi-select items)</li> <li>Part II-Reasoning and Application/Modeling Items (open-ended items) <i>or</i> *Part IIA-Reasoning and Application/Modeling Items (open-ended items)</li> </ul>
<b>Unit 2:</b> Strategies and Properties of Multiplication	<b>36 days</b>	4.NBT.B.4 4.OA.A.3 4.OA.B.4 *5.NBT.B.5 *5.OA.A.1 *5.OA.A.2	<ul style="list-style-type: none"> <li>Multiplication and division are inverse operations</li> <li>There are multiple ways to solve multiplication and division problems.</li> <li>A whole number is a multiple of each of its factors.</li> <li>Computational fluency requires efficient, accurate, and flexible methods for computing.</li> </ul>	<ul style="list-style-type: none"> <li><i>How does understanding multiplication help with understanding division?</i></li> <li><i>Why is it important to use models and multiple strategies for solving multiplication and division problems?</i></li> <li><i>What makes a computational strategy both effective and efficient?</i></li> <li><i>Why is it important to estimate products?</i></li> </ul>	<ul style="list-style-type: none"> <li>Part I - Periodic/Unit Assessment (multiple choice and multi-select items)</li> <li>Part II-Reasoning and Application/Modeling Items (open-ended items) <i>or</i> *Part IIA-Reasoning and Application/Modeling Items (open-ended items)</li> </ul>
<b>Unit 3:</b> Strategies and Properties of Division	<b>27 days</b>	4.NBT.A.1 4.NBT.B.6 4.OA.A.1 4.OA.A.2 4.OA.A.3 *5.NBT.B.6 *5.OA.A.2	<ul style="list-style-type: none"> <li>Multiplication and division are inverse operations.</li> <li>Quotients can be computed using multiple strategies.</li> <li>A whole number is a multiple of each of its factors.</li> <li>Estimation serves as a tool for judging reasonableness of quotients.</li> </ul>	<ul style="list-style-type: none"> <li><i>How does understanding multiplication help you understand division?</i></li> <li><i>How are multiples and factors related?</i></li> <li><i>How are different strategies for solving division problems connected?</i></li> <li><i>Why is it important to estimate quotients?</i></li> </ul>	<ul style="list-style-type: none"> <li>Part I - Periodic/Unit Assessment (multiple choice and multi-select items)</li> <li>Part II-Reasoning and Application/Modeling Items (open-ended items) <i>or</i> *Part IIA-Reasoning and Application/Modeling Items (open-ended items)</li> </ul>

\*Grade 4 Advanced

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<b>Unit 4:</b> Fractions	<b>43 days</b>	4.NF.A.1 4.NF.A.2 4.NF.B.3 4.NF.B.4 *5.NF.A.1 *5.NF.A.2 *5.NF.B.3 *5.NF.B.4	<ul style="list-style-type: none"> <li>Fractions can represent parts of regions/areas, parts of sets, parts of measures, division or ratios.</li> <li>There are multiple models and/or methods for comparing and computing with fractions.</li> <li>Operations with fractions have the same meanings as operations with whole numbers.</li> <li>Equivalent fractions describe the same quantity, the same area of a region, and the same point on a number line.</li> </ul>	<ul style="list-style-type: none"> <li><i>How can fractions, including fractions greater than one, modeled, compared, and ordered?</i></li> <li><i>How are models used to show how fractional parts are combined or separated?</i></li> <li><i>How are fraction models connected to fraction operations?</i></li> </ul>	<ul style="list-style-type: none"> <li>Part I - Periodic/Unit Assessment (multiple choice and multi-select items)</li> <li>Part II-Reasoning and Application/Modeling Items (open-ended items) <i>or</i> *Part IIA-Reasoning and Application/Modeling Items (open-ended items)</li> </ul>
<b>Unit 5:</b> Decimal Relations/Data and Measurement	<b>25 days</b>	4.MD.A.1 4.MD.A.2 4.MD.A.3 4.MD.B.4 4.NF.C.5 4.NF.C.6 4.NF.C.7 *5.MD.B.2 *5.NBT.A.3 *5.NBT.A.4 *5.NBT.B.7	<ul style="list-style-type: none"> <li>Data and graphs can be analyzed and provide a variety of information.</li> <li>In measurement, it requires a greater number of smaller units to equal the same length, mass, or capacity using larger units.</li> <li>The customary and metric systems of measurement can both be used to measure mass, length, or capacity.</li> <li>Perimeter and area can be computed using formulas.</li> </ul>	<ul style="list-style-type: none"> <li><i>How do you determine the most appropriate unit of measure when finding length, capacity, weight, or mass?</i></li> <li><i>How are units in the same system of measurement related?</i></li> <li><i>Why is it important to analyze data?</i></li> <li><i>How are area and perimeter related?</i></li> </ul>	<ul style="list-style-type: none"> <li>Part I - Periodic/Unit Assessment (multiple choice and multi-select items)</li> <li>Part II-Reasoning and Application/Modeling Items (open-ended items) <i>or</i> *Part IIA-Reasoning and Application/Modeling Items (open-ended items)</li> </ul>
<b>Unit 6:</b> Patterns and Geometry	<b>23 days</b>	4.G.A.1 4.G.A.2 4.G.A.3 4.MD.C.5 4.MD.C.6 4.MD.C.7 4.OA.C.5 *5.G.A.1 *5.G.A.2 *5.G.A.3 *5.G.A.4	<ul style="list-style-type: none"> <li>The properties of geometric figures determine how the figures can be described, analyzed, compared, and classified.</li> <li>Angles can be classified into types based on their characteristics.</li> <li>Angle measures can be combined or decomposed into smaller angles.</li> <li>Angle degrees measure the rotation of the rays in reference to a circle.</li> </ul>	<ul style="list-style-type: none"> <li><i>How are attributes used to classify geometric figures?</i></li> <li><i>How are angles classified and measured?</i></li> <li><i>How are angle measurements connected to the number of degrees in a circle?</i></li> <li><i>How can I use a protractor as a tool to measure angles?</i></li> </ul>	<ul style="list-style-type: none"> <li>Part I - Periodic/Unit Assessment (multiple choice and multi-select items)</li> <li>Part II-Reasoning and Application/Modeling Items (open-ended items) <i>or</i> *Part IIA-Reasoning and Application/Modeling Items (open-ended items)</li> </ul>

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