



# Mathematical Practices Grades K - 8

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- 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.**



## 3rd Grade Mathematics Curriculum Map

Trimester	Unit of Study	Illinois Learning Standards	Mathematical Practice Standard	Learning Targets
1	Addition & Subtraction Patterns  Introduction to Multiplication  Mult-Digit Addition & Subtraction	2.OA.e 3.OA.1 3.OA.3 3.OA.4 3.OA.5 3.OA.6 3.OA.7 3.OA.8 3.OA.9  2.NBT.5 3.NBT.1 3.NBT.2  2.MD.1 2.MD.3 2.MD.5 3.MD.3	3.MP.1 3.MP.2 3.MP.3 3.MP.4 3.MP.7	<ul style="list-style-type: none"> <li>Fluently add and subtract within 20 using mental strategies.</li> <li>Use addition and subtraction within 100 to solve one-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.</li> <li>Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>Identify patterns among basic addition facts.</li> <li>Fluently add within 20 using mental strategies.</li> <li>Identify patterns among the basic addition facts, and explain those patterns by referring to properties of the operation.</li> <li>Solve one-step subtraction story problems with minuends to 100 involving situations of taking from and comparing, with unknowns in all positions</li> </ul>
2	Measurement & Fractions	3.OA.1 3.OA.2 3.OA.3 3.OA.4 3.OA.5 3.OA.6 3.OA.7 3.OA.8	3.MP.1 3.MP.2 3.MP.3 3.MP.4 3.MP.5 3.MP.6 3.MP.7 3.MP.8	<ul style="list-style-type: none"> <li>Solve one-step story problems using addition and subtraction; select equations with a letter standing for the unknown quantity to represent one-step story problems</li> <li>Solve two-step story problems using addition and subtraction; write equations to represent two-step story problems</li> <li>Round whole numbers to the nearest 10; to the nearest</li> </ul>



	<p>Multiplication, Division &amp; Area</p>          <p>Geometry</p>	<p>3.OA.9</p> <p>3.NBT.2</p> <p>3.MD.1</p> <p>3.MD.2</p> <p>3.MD.5 a-b</p> <p>3.MD.6</p> <p>3.MD.7 a-b</p> <p>3.MD.8</p> <p>3.G.1</p> <p>3.G.2</p> <p>3.NF.1</p> <p>3.NF.2 a-b</p> <p>3.NF.3 a-d</p>		<p>100</p> <ul style="list-style-type: none"> <li>● Estimate sums to approximate solutions to problems</li> <li>● Use strategies based on place value, properties of operations, or the relationship between addition and subtraction to add fluently with sums to 1,000</li> <li>● Assess the reasonableness of answers to story problems using mental computation, rounding and other estimation strategies</li> <li>● Read and write numbers to 10,000 represented with base-ten numerals, number names and in expanded form</li> <li>● Compare 4-digit numbers, based on an understanding of what the digits in the thousands, hundreds, tens, and ones places represent</li> <li>● Use <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record comparisons of 4-digit numbers</li> <li>● Order numbers from 0 to 10,000</li> <li>● Place fractions in their correct positions on a number line</li> <li>● Identify equivalent fractions by comparing their sizes</li> <li>● Recognize simple equivalent fractions; use sketches to show why two fractions must be equivalent</li> <li>● Recognize fractions that are equivalent to whole numbers</li> <li>● Demonstrate an understanding of a unit fraction <math>\frac{1}{b}</math> as 1 of <math>b</math> equal parts into which a whole has been partitioned</li> <li>● Partition shapes into parts with equal areas; express the area of each equal part of a whole as a unit fraction of the whole</li> <li>● Represent fractions with denominators of 2, 3, 4, 6, and 8 as parts of a whole</li> </ul>
3	<p>Extending Multiplication &amp; Fractions</p>	<p>3.OA.5</p> <p>3.OA.8</p> <p>3.NBT.3</p>		<ul style="list-style-type: none"> <li>● Interpret products of whole numbers; write story problems or describe problem situations to match a multiplication expression or equation</li> <li>● Interpret quotients of whole numbers; write story problems or describe problem situations to match a</li> </ul>



	<p>Bridge Design &amp; Construction: Data Collection &amp; Analysis</p>	<p>3.MD.1 3.MD.2 3.MD.3 3.MD.4 3.MD.6 3.MD.7 3.MD.8</p>		<p>division expression or equation</p> <ul style="list-style-type: none"> <li>● Solve multiplication and division story problems with products to 100 involving situations of equal groups and arrays</li> <li>● Solve for the unknown in a multiplication or division equation involving 3 whole numbers</li> <li>● Solve division problems by finding an unknown factor</li>   <li>● Fluently multiply and divide with products and dividends to 100 using strategies</li> <li>● Solve two-step story problems using multiplication and division; write/select equations with a letter standing for the unknown quantity to represent two-step story problems</li> <li>● Find the area of plane figures by using square units to cover the figure without overlapping</li> <li>● Find the area of rectilinear figures by multiplying the length and width</li> <li>● Find the perimeter of polygons</li> <li>● Solve division problems by finding an unknown factor (e.g., solve <math>32 \div 8</math> by finding the number that makes 32 when multiplied by 8)</li> <li>● Solve story problems that call for finding the area of a rectangle/ figure that can be decomposed into non-overlapping rectangles</li> <li>● Find an unknown side length of a polygon, given its perimeter and other side lengths</li> <li>● Identify attributes of quadrilaterals and categorize and group polygons based on their attributes</li> <li>● Partition shapes into parts with equal areas/ express the area of each equal part of a whole as a unit fraction of the whole</li> <li>● Solve story problems that involve creating rectangles with the same perimeter but different areas/ same areas but different perimeters</li> <li>● Compare fractions and explain the reasoning for why two fractions are/ are not equivalent</li> </ul>
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