

## 4<sup>th</sup> Grade Math Syllabus

<b>Investigation Units Covered</b>	<b>Math Concepts</b>
<b>Invest. Unit 5, Supplement with Envision Topic 4 (Number sense and complex addition and subtraction)</b>	<ul style="list-style-type: none"> <li>• Using multiples of 10, 100, and 1,000, to add, subtract, and sequence numbers</li> <li>• Identifying, describing, and comparing addition and subtraction strategies by focusing on how each strategy starts</li> <li>• Solving subtraction problems by breaking numbers apart</li> </ul>
<b>Invest. Unit 1, Supplement with Envision Topic 6-2 (Multiplication representations)</b>	<ul style="list-style-type: none"> <li>• Using arrays to model multiplication situations</li> <li>• Breaking apart arrays to find the product</li> <li>• Finding multiples and factors of a number</li> </ul>
<b>Invest. Unit 3, Supplement with Envision Topic 8-2 (Multiplication algorithms)</b>	<ul style="list-style-type: none"> <li>• Developing strategies for multiplying that involve breaking apart numbers</li> <li>• Use pictures, diagrams, or models to represent and solve division story problems</li> <li>• Writing story problems and working with remainders in the context of the story</li> <li>• Multiplying multiples of ten and 2-digit numbers</li> </ul>
<b>Invest. Unit 4 (Units of measurement and angles)</b>	<ul style="list-style-type: none"> <li>• Using U.S. standard and metric units to accurately measure length</li> <li>• Finding perimeter using square units and estimating measurement lengths</li> <li>• Working with polygons and combining polygons to make other polygons</li> <li>• Measuring and combining angles using polygons</li> <li>• Measuring the area of polygons and finding symmetry</li> <li>• Recognizing acute, right, and obtuse angles</li> </ul>
<b>Invest. Unit 8 (Multiplication algorithms)</b>	<ul style="list-style-type: none"> <li>• Solving 2-digit multiplication problems by breaking numbers apart</li> <li>• Solving division problems by making groups and using strategies</li> </ul>
<b>Invest. Unit 6 (Basic fraction operations)</b>	<ul style="list-style-type: none"> <li>• Finding fractions of an area with same parts or different wholes</li> <li>• Ordering, comparing, adding, subtracting, and multiplying fractions</li> <li>• Comparing and combining decimals</li> </ul>
<b>Invest. Unit 7 (Volume of cubes)</b>	<ul style="list-style-type: none"> <li>• Working with cubes and finding the volume of boxes and equivalent measurements</li> </ul>
<b>Invest. Unit 9 (Comparing data)</b>	<ul style="list-style-type: none"> <li>• Describing the relationship between two quantities</li> </ul>

	<ul style="list-style-type: none"><li>• Plotting points on a graph and comparing graph to the situation it represents</li></ul>
<b>Invest. Unit 2 (Reading and communicating data)</b>	<ul style="list-style-type: none"><li>• Describing and representing data</li><li>• Making and reading graphs and line plots to determine facts about the data</li><li>• Develop own data questions and analyze results</li></ul>