

**5<sup>th</sup> Grade Math**  
**PISD Curriculum: Year at a Glance**

<b>Bundle</b>	<b>Title</b> Big Ideas/Enduring Understandings	<b>Guiding Questions</b>
<b>1</b>	<p><b><i>Place Value/Problem Solving</i></b></p> <p>The base 10 number system uses the position of the digit to determine the value of the digit and the resulting number in order to communicate numerical expressions and relationships.</p>	<p>What value does each position on the place value chart represent?</p> <p>What value does each period on the place value chart represent?</p> <p>As the place value chart is extended in each direction from the decimal point, what happens to the value of each position?</p> <p>How is place value used to understand the meaning of numbers in the real world?</p>
<b>2</b>	<p><b><i>Addition and Subtraction</i></b></p> <p>Numbers represent values that can be joined, separated and compared using a variety of methods.</p>	<p>What are different methods of joining, separating and comparing numbers?</p> <p>How do you know when to join, separate or compare numbers?</p> <p>Can the process of regrouping be demonstrated, explained or justified?</p>
<b>3</b>	<p><b><i>Multiplication and Division</i></b></p> <p>Patterns can be used to join, separate and compare numbers using a variety of methods.</p>	<p>How does multiplication relate to division?</p> <p>When would multiplication or division be used to solve a problem?</p> <p>What strategy was used to solve this problem / equation?</p>
<b>4</b>	<p><b><i>Problem Solving / Reasonableness / Estimation</i></b></p> <p>There are a variety of methods to solve a problem and evaluate the reasonableness of a solution.</p>	<p>What strategies can be used to solve this problem?</p> <p>Is there another way to solve this problem?</p> <p>How will the solution look?</p> <p>How can you justify the reasonableness of the solution?</p>
<b>5</b>	<p><b><i>Geometry and Spatial Reasoning</i></b></p> <p>Represent and communicate about objects using their attributes and generalize how their attributes repeat in predictable ways.</p>	<p>How are 2 dimensional and 3 dimensional objects described, using their attributes?</p> <p>How can you use a 2 dimensional shape to represent a 3 dimensional solid?</p> <p>What are the most critical attributes used to classify an object?</p>

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<b>6</b>	<b><i>Patterns / Algebraic Thinking</i></b>  Finding and representing the mathematical relationship between quantities	What is a variable? How can you use patterns to show relationships? How can a pattern be extended using a mathematical expression that is either given or determined?
<b>7</b>	<b><i>Fractions and Decimals</i></b>  A fraction or decimal describes the division of a whole into equal parts and can be interpreted in more than one way.	How do fractions and decimals relate to one another? What are multiple ways to represent one fractional value? What strategies can be used to compare and order fractions and decimals?
<b>8</b>	<b><i>Adding &amp; Subtracting Fractions / Statistics / Probability</i></b>  Fractions can be combined and separated using a variety of methods. Data can be collected and analyzed to determine an answer to a specific question. Chances of an event occurring can be made by an expression or a prediction.	How can different models be used to add and subtract fractions? How do you determine if a fraction is in its simplest form? What are some methods used to display collected data? Which type of graph is most appropriate to represent a given set of data? What is the probability of a given event? How can fractions be used to make a prediction of a future event?
<b>9</b>	<b><i>Measurement</i></b>  Measurement systems use units to describe attributes of length, perimeter, area, capacity and mass.	How is tiling used to find accurate measurements? What is the starting point when measuring? How can you convert units of measurement within the same system?
<b>10</b>	<b><i>TAKS Review / Algebraic Thinking</i></b>  Problems can be solved by selecting and developing an appropriate problem-solving plan or strategy.	How do you know if your answer is reasonable? Is there more than one way to solve a problem? How do you determine the best problem solving strategy?
<b>11</b>	<b><i>Algebraic Thinking</i></b>  Solving for unknown values and patterns within problem	How can relationships in equations help determine an outcome? How do the manipulations of variables change outcomes?

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	situations.	When is Algebra used in the real world?
<b>12</b>	<i>Hands-On Equations</i> Compare values and equations to determine equivalency.	How do hands-on equations show algebraic relationships? Can a solution be solved using more than one method? How can reasonableness be proven?