

Hickman County Curriculum Map

Sixth Grade

Mathematics

Fifth Six Weeks

Grade Level Expectations	Checks for Understanding	Student Performance Indicator(s)
<p>6.1.1 Use mathematical language, symbols, and definitions while developing mathematical reasoning.</p> <p>6.1.7 Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.</p> <p>6.1.6 Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas precisely.</p> <p>6.1.8 Use technologies/</p>	<p>6.1.9 Use age-appropriate books, stories, and videos to convey ideas of mathematics. [<i>Sir Cumference</i> book series]</p> <p>6.3.3 Recognize the use of juxtaposition (such as $3x$, ab) to stand for multiplication, and the convention in these cases of writing numbers before letters. [pages 582-584]</p> <p>6.3.4 Generate data and graph relationships concerning measurement of length, area, volume, weight, time, temperature, money, and information. [various graphing activities]</p> <p>6.3.7 Move fluently between different representations (such as verbal, tabular, numerical, algebraic, and graphical) of equations and expressions. [pages 582-584]</p> <p>6.4.11 Relate the circumference of a circle with the perimeter of a polygonal figure. [<i>Sir Cumference</i> stories & pages 484 - 491]</p> <p>6.4.12 Derive the meaning of Pi using concrete models and/or appropriate technology. [Sir Cumference stories</p>	<p>6.3.3 Write equations that correspond to given situations or represent a given mathematical relationship. [page 583 & lesson 12.1]</p> <p>6.3.5 Translate between verbal expressions/sentences and algebraic expressions/equations. [pages 582-584]</p> <p>6.4.4 Calculate with circumferences and areas of circles. [Chapters 9-10]</p> <p>6.4.5 Determine the surface area and volume of prisms, pyramids and cylinders. [Chapters 9-10]</p> <p>6.4.6 Given the volume of a cone/pyramid, find the volume of the related cylinder/prism or vice versa. [Chapters 9-10]</p>

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<p>manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts.</p> <p>6.3.2 Interpret and represent algebraic relationships with variables in expressions, <u>simple equations and inequalities.</u></p> <p>6.3.3 Extend order of operations to include grouping symbols and exponents.</p> <p>6.3.4 Use expressions, equations and formulas to solve problems.</p> <p>6.4.3 Develop and use</p>	<p>& pages 484 – 491]</p> <p>6.4.13 Understand the relationships among the radius, diameter, circumference and area of a circle, and that the ratio of the circumference to the diameter is the same as the ratio of the area to the square of the radius and that this ratio is called Pi. [Sir Cumference stories & pages 484 – 491]</p> <p>6.4.15 Find lengths, given areas, or volumes, and vice versa. [lessons 10.4-10.7 & activity on page 506]</p> <p>6.4.16 Solve contextual problems involving area and circumference of circles, surface areas and volumes of prisms, pyramids, cones, and cylinders. [lessons 10.4 - 10.7 & activity on page 506]</p> <p>6.4.17 Use manipulatives to discover the volume of a pyramid is one third the volume of the related prism (the heights and base areas are equal) [lesson 10.7, page 510] $V = \frac{1}{3}(wh)$ volume of pyramid (video)http://www.mathexpression.com/volume-of-a-pyramid.html</p> <p>6.4.18 Use manipulatives to discover the volume of a</p>	
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<p>formulas to determine the circumference and area of circles, and the area of trapezoids, and develop strategies to find the area of composite shapes.</p> <p>6.4.4 Develop and use formulas for surface area and volume of 3-dimensional figures.</p>	<p>cone is one-third the volume of the related cylinder (the heights and base areas are equal). [V=Pi x radius squared x height] volume of a cone (video)http://www.mathexpression.com/volume-of-a-cone.html</p>	
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