

Campbell County Schools
3rd Nine Weeks at-a-Glance
8th Grade Math

<p>Mathematical Practices:</p> <ol style="list-style-type: none"> 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. 	<p>Common Core Coding Explanation:</p> <div style="text-align: center; margin: 10px 0;"> <p>8th Grade Cluster Standard</p> </div> <p>Domains: RP- Ratios and Proportional Relationships NS- Number System EE- Expressions and Equations G- Geometry SP- Statistics and Probability</p>
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Common Core State Standard	Aligned Activities	Suggested Pacing	Aligned Textbook Lessons
<p>8.EE.C.8 Analyze and solve pairs of simultaneous linear equations.</p> <p>a) 8.EE.C.8a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.</p> <p>b) 8.EE.C.8b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. <i>For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</i></p> <p>c) 8.EE.C.8c Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the</i></p>		15 days	

<i>line through the second pair.</i>			
8.G.B.6 Explain a proof of the Pythagorean Theorem and its converse.		5 days	
8.G.B.7 Apply the Pythagorean Theorem to determine unknown sides lengths in right triangles in real-world and mathematical problems in two and three dimensions.			
8.G.B.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.		5 days	
8.G.A.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i>		3 days	
8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations: a) 8.G.A.1a Lines are taken to lines, and line segments to line segments of the same length. b) 8.G.A.1b Angles are taken to angles of the same measure. c) 8.G.A.1c Parallel lines are taken to parallel lines.		7 days	
8.G.A.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a			

<p>sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</p>		<p>3 days</p>	<p>(Congruence and Transformations)</p>
<p>8.G.A.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.</p>		<p>2 days</p>	
<p>8.G.A.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.</p>		<p>4 days</p>	<p>(Similarity and Transformations)</p>