



Hattiesburg Public School District

Grade 8 Mathematics Units

2015 – 2016



Unit 6: Transformations	Time Frame: 12 days (March 21 - April 8)
Content Standards	Standards for Mathematical Practice
Major Standards	
<p>8.G.1a Verify experimentally the properties of rotations, reflections, and translations: a. Lines are taken to lines, and line segments to line segments of the same length.</p> <p>8.G.1b Verify experimentally the properties of rotations, reflections, and translations: b. Angles are taken to angles of the same measure.</p> <p>8.G.1c Verify experimentally the properties of rotations, reflections, and translations: c. Parallel lines are taken to parallel lines.</p> <p>8.G.2 Understand that a two- dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</p> <p>8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two- dimensional figures using coordinates.</p> <p>8.G.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>(1) Make sense of problems and persevere in solving them.</p> <p>(2) Reason abstractly and quantitatively.</p> <p>(3) Construct viable arguments and critique the reasoning of others.</p> <p>(4) Model with mathematics.</p> <p>(5) Use appropriate tools strategically.</p> <p>(6) Attend to precision.</p> <p>(7) Look for and make use of structure.</p> <p>(8) Look for and express regularity in repeated reasoning.</p> <p>8.G.1 – MP 4, 5, 6, 7, 8</p> <p>8.G.2 – MP 2, 4, 6, 7</p> <p>8.G.3 – MP 3, 4, 5, 6, 7</p> <p>8.G.4 – MP 2, 4, 5, 6, 7</p>



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Supporting Standards	
Additional Standards	
Pre-requisite Standards	
8.G.1a <ul style="list-style-type: none">● Explain and describe the process of transforming polygons.● Name two-dimensional shapes.● Use and understand the coordinate plane.	
8.G.1b <ul style="list-style-type: none">● Explain and describe the process of transforming polygons.● Name two-dimensional shapes.● Use and understand the coordinate plane.	
8.G.1c <ul style="list-style-type: none">● Explain and describe the process of transforming polygons.● Name two-dimensional shapes.● Use and understand the coordinate plane.	
8.G.2 <ul style="list-style-type: none">● Explain and describe the process of transforming polygons.● Understand concepts of congruence and corresponding parts.	
8.G.3 <ul style="list-style-type: none">● Explain and describe the process of transforming polygons.● Use and understand the coordinate plane.● Understand concepts of congruence and corresponding parts.	



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8.G.4 <ul style="list-style-type: none"> Explain and describe the process of transforming polygons. Understand the concepts of similar figures and corresponding parts. 				
Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Lesson Topic Review Transformations Standard Ref 8.G.1 Resource/Strategy https://docs.google.com/document/d/1uM3pZuKUJugPiGKTLbQXvJAPt_qod2PYicWIKkUapM8/edit	Lesson Topic Verify Properties of Rotations, Reflections, Translations Standard Ref 8.G.1 Resource/Strategy https://docs.google.com/document/d/1uM3pZuKUJugPiGKTLbQXvJAPt_qod2PYicWIKkUapM8/edit	Lesson Topic Transforming Polygons Standard Ref 8.G.2 Resource/Strategy https://docs.google.com/document/d/1uM3pZuKUJugPiGKTLbQXvJAPt_qod2PYicWIKkUapM8/edit	Lesson Topic Sequence of Transformations Standard Ref 8.G.2 Resource/Strategy https://docs.google.com/document/d/1uM3pZuKUJugPiGKTLbQXvJAPt_qod2PYicWIKkUapM8/edit	Lesson Topic Formative Assessment Lesson (FAL) Standard Ref 8.G Resource/Strategy Representing and Combining Transformations www.map.mathshell.com
Lesson 6	Lesson 7			
Lesson Topic Effects of Dilation, Reflection, Rotations, Translations on 2D Polygons Standard Ref 8.G.3 Resource/Strategy	Lesson Topic Understanding Similarities of Polygons from a Sequence of Transformations Standard Ref 8.G.4			



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https://docs.google.com/document/d/1uM3pZuKUJugPiGKTLbQXvJAPt_qod2PYicWIKkUapM8/edit	Resource/Strategy https://docs.google.com/document/d/1uM3pZuKUJugPiGKTLbQXvJAPt_qod2PYicWIKkUapM8/edit			
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