Hattiesburg Public School District
Grade 6 Mathematics Units
2015 – 2016

Unit 7: Area & Volume of 2D & 3D Figures	**Time Frame:** 4 Weeks (Feb 8-March 4, 2016)
Content Standards	**Standards for Mathematical Practice**
Major Standards	(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 reasoning.
Supporting Standards	
6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. **6.G.2** Find the volume of a rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prisms. Apply the formulas V=lwh and V=bh to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world mathematical problems. **6.G.4** Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	
Additional Standards	
Pre-requisite Standards	

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5.MD.5a Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. **5.MD.5b** Apply the formulas V =l x w x h and V = b x h for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Lesson Topic: Finding area of polygons using formulas. **Standard Ref:** 6.G.1 **Resource:** EngageNy, Module 5, Topic A, Lesson 1 **Strategy:** Allow students to discover the formula.	**Lesson Topic:** Compose & Decompose Polygons **Standard Ref**: 6.G.1 **Resource: Engage NY: Module 5, Topic A, Lessons 4-6** www.https://learnzillion.com/lessonsets/148 **Strategy:**	**Lesson Topic:** Finding Volume (cubes) **Standard Ref**: 6.G.2 **Resource:** www.https://learnzillion.com/lessonsets/221 **Strategy:**	**Lesson Topic:** Finding Volume (formula) **Standard Ref**: 6.G.2 **Resource:** EngageNy, Module 5, Topic C, Lessons 11 & 12 **Strategy:**	**Lesson Topic:** Identify Nets of 3D figures **Standard Ref:** 6.G.4 **Resource: Engage NY: Module 5, Topic D, Lessons 15, 16** https://learnzillion.com/lesson_plans/222#fndtn-lesson **Strategy:**
Lesson 6	**Performance Task**			

Lesson Topic: Surface Area **Standard Ref:** 6.G.4 **Resource: Engage NY: Module 5, topic D, Lessons 17, 18, & 19** www.https://learnzillion.com/lessonsets/278 **Strategy:**	https://grade6commoncoremath.wikispaces.hcpss.org/Unit+4+Geometry			