Hattiesburg Public School District
Grade 5 Mathematics Units
2015 – 2016

Unit 9: Volume	Time Frame: 3 Weeks (January 26- February 9)
Content Standards	**Standards for Mathematical Practice**
Major Standards	(1) Make sense of problems and persevere in solving them.
5.MD.3a Recognize volume as an attribute of solid figures and understand concepts of volume measurement. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.	(2) Reason abstractly and quantitatively. (3) Construct viable arguments and critique the reasoning of others.
5.MD.3b Recognize volume as an attribute of solid figures and understand concepts of volume measurement. A solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units.	(4) Model with mathematics. (5) Use appropriate tools strategically. (6) Attend to precision. (7) Look for and make use of structure.
5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	(8) Look for and express regularity in repeated reasoning.
5.MD.5a Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 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 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ 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.

5.MD.5c Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

Supporting Standards

Additional Standards

Pre-requisite Standards

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Performance Task
Lesson Topic: Exploring and Understanding Volume Standard Ref: 5.MD.3a Resource/Strategy	Lesson Topic: Finding Volume using Unit Cubes Standard Ref: 5.MD.3b, 5.MD.4 Resource/Strategy	Lesson Topic: Finding Volume Using Formulas Standard Ref: 5.MD.5a/b Resource/Strategy	Lesson Topic: Finding the Volume of Composite Figures Standard Ref: 5.MD.5c Resource/Strategy	