Unit	# **5th Grade: Unit 4 - Volume** **Math Investigations Book: Prisms and Pyramids** **Standards for Grade 5** UNIT 1= Place Value, Addition & Subtraction of Whole Numbers UNIT 2= Addition and Subtraction of Fractions UNIT 3= Operations with Decimals and Place Value UNIT 4= Volume UNIT 5= Multiplication and Division of Whole Numbers UNIT 6= Multiplication and Division of Fractions UNIT 7= Names and Properties of Shapes UNIT 8= Multiplication and Division of Greater Whole Numbers UNIT 9= Shape and Number Patterns
4,5,9,3	**5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.**
4,5,8,3	**5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.**
4,5,8,3	**5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.**
4	**5.MD.3.a 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.**
4	**5.MD.3.b 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	**5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.**
4	**5.MD.5.a 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.**
4	**5.MD.5.b Apply the formula $V = l \times w \times h$ 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.**
4	**5.MD.5.c 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.**