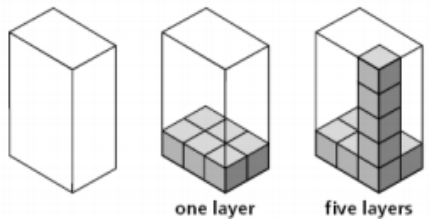
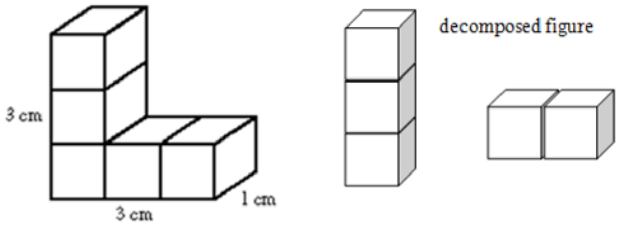
Grade 5 Unit 5 Family Resource
Unit Name: Understanding Volume and Equations

What's my child learning in Unit 5?	What does this mean? What does it look like?	How can I help my child at home?
• Students will use parentheses, brackets, or braces in a numerical expressions and evaluate expressions with these symbols.	Examples: 15 - 7 – 2 = 10 → 15 - (7 – 2) = 10 3 x 125 ÷ 25 + 7 = 22 → [3 x (125 ÷ 25)] + 7 = 22 24 ÷ 12 ÷ 6 ÷ 2 = 2 x 9 + 3 ÷ ½ → 24 ÷ [(12 ÷ 6) ÷ 2] = (2 x 9) + (3 ÷ ½) Compare 3 x 2 + 5 and 3 x (2 + 5)	Math Playground - Video explaining how to solve an expression using the Order of Operations.
• Students will use parentheses and brackets to write simple expressions that record calculations.	Example: Write an expression for the steps "double five and then add 26." Student *(2 x 5) + 26*	Helpful Hints - Solve expressions with parentheses, brackets, or braces.
• Students will write simple expressions that record calculations with numbers, and interpret, numerical expressions without evaluating them.	This standard calls for students to verbally describe the relationship between expressions without actually calculating them. Students should apply their reasoning of the four operations as well as place value while describing the relationship between numbers.	Exponent Card Game- Website explaining a game to play with a deck of cards to practice exponents which will help with order of operations.
• Students will recognize volume as an attribute of solid figures and understand that a cubic unit is used to measure volume.		Build Paper Cubes - Printable cubes to fold and put together with worksheet using the paper cubes to calculate volume.

	(3 x 2) represented by first layer (3 x 2) x 5 represented by number of 3 x 2 layers (3 x 2) + (3 x 2) + (3 x 2)+ (3 x 2) = 6 + 6 + 6 + 6 + 6 + 6 = 30 6 representing the size/area of one layer	
• Students will understand volume as the filling of a three dimensional array with no gaps or overlaps.		Interactive Volume Lesson - Animation shows how unit cubes fill a larger cube to demonstrate volume. Some interactive ability
• Students will measure volumes by counting unit cubes, using cubic cm, cubic in., cubic ft., and improvised units.		LearnZillion - Video lesson on finding volume by counting cubes.
• Students will connect the area formula to volume to solve for an unknown using visual models or manipulatives by identifying the length, width and height.		LearnZillion - Video lesson on the relationship of volume and multiplication
• Students will solve real world problems by applying the formula for volume and relating it to the properties of addition and multiplication		Volume of Cubes and Rectangular Prisms - Online practice for finding the volume of cubes and rectangular prisms using the formula for volume.
• Students will recognize volume as additive by finding the volume of solid figures of two or more non-overlapping parts.		Cubes - Online game to calculate the volume of different three dimensional figures. Can also decompose the figures.