WORTHINGTON CHRISTIAN SCHOOLS

Curriculum Map: Mid-level Mathematics

Essential Questions	Grade Level Scope and Sequence
What do effective problem solvers do when they get stuck? How does finding the common characteristics among similar problems help me to be a more efficient problem solver? How do I know my answer is reasonable? What makes a data representation useful? How can I apply this to my future interest?	The Learner will….. 5th grade: 1. Compare, order, estimate, multiply, and divide up to 4-digit whole numbers. 2. Estimate, add, subtract, multiply, and divide fractions, and represent fractions as percent. 3. Recognize, write, and evaluate simple algebraic expressions. 4. Compare, order, round, multiply, and divide decimals to thousandths. 5. Read, write, and interpret ratios with 2 or 3 quantities. 6. Understand classification and properties of triangles, and four-sided figures to calculate area. 7. Analyze and solve multi-step problems. 6th Grade 1. Represent integers on the number line. 2. Apply bar modeling to solve problems involving multiplication and division of fractions and decimals. 3. Apply principles of ratios to solve problems involving rates, unit rates, and percentages. 4. Write, solve, and graph simple linear equations and inequalities. 5. Apply basic geometric relationships in order to solve problems involving areas of composite figures 6. Collect, organize, analyze, and display statistical data while applying measures of central tendency. 7th Grade 1. Differentiate between different types of numbers in a number season 2. Perform basic operations with all integers 3. Model real world situations using both equations and inequalities 4. Apply geometrical code structure to angles and straight lines 5. Applying knowledge of basic shapes to make connections with 3D objects and find their surface areas and volumes 6. Take and analyze samples of data

	8th Grade
	1. Use rules of exponents to simplify large multiplicative expressions.
	2. Solve systems of linear equations
	3. Graph linear equations
	4. Apply algebraic principles to geometrical problems
	5. Recognize compound and dependent events and find the probability of the outcome
	6. Find trends in data, categorize information, and analyze trends