



St. Thomas the Apostle School

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7th GRADE CURRICULUM MAP – MATHEMATICS – Accelerated Pre-Algebra

Curriculum Maps are used as guidelines for instruction. As such, they are considered to be working documents rather than a static formula for teachers and students to follow. What this means is that there is flexibility to this map which allows for the instructor to respond to several factors: the particular needs of the current group of students, the incorporation of new material, and/or the subtraction of material. With this in mind, curriculum maps are analyzed by faculty and administration on a yearly basis for revisions. Articulation meetings also take place with the grade levels above and below to check for continuity of the curriculum.

Quarter	Content and Skills
<i>Quarter 1</i>	Chapter 1 Variables, Expressions and Integers -Expressions and Variables -Powers and Exponents -Order of Operations -Comparing and Ordering Integers -Adding Integers -Subtracting Integers -Mean, Median, Mode, Range -The Coordinate Plane Chapter 2 Solving Equations -Properties and Operations -Perimeter and Area -Rates and Unit -The Distributive Property -Simplifying Variable Expressions -Variables and Expressions -Solving Equations Using Addition or Subtraction -Solving Equations Using Multiplication or Division -Decimal Operations and Equations with Decimals
<i>Quarter 2</i>	Chapter 3 Multi-Step Equations and Inequalities -Solving Two-Step Equations -Solving Equations Having Like Terms and Parentheses -Solving Equations with Variables on Both Sides -Solving Inequalities Using Addition or Subtraction -Solving Inequalities using Multiplication or Division -Solving Multi-Step Inequalities Chapter 4 Factors, Fractions and Exponents -Factors and Prime Factorization -Greatest Common Factor -Equivalent Fractions -Least Common Multiple -Rules of Exponents -Negative and Zero Exponents -Scientific Notation
<i>Quarter 3</i>	Chapter 5 Rational Numbers and Equations -Rational Numbers -Adding and Subtracting Like Fractions -Adding and Subtracting Unlike Fractions -Multiplying Fractions -Dividing Fractions -Using Multiplicative Inverses to Solve Equations -Equations and Inequalities with Rational Numbers Chapter 6 Ratio, Proportion, and Probability -Ratios and Rates -Writing and Solving Proportions -Solving Proportions Using Cross Products -Similar and Congruent Figures -Basic Geometry Concepts -Similarity and Measurement -Scale Drawings -Probability and Odds -The Counting Principle Chapter 7 Percents -Percents and Fractions -Percents and Proportions -Percents and Decimals -The Percent Equation -Percent of Change -Percent Applications -Simple and Compound Interest
<i>Quarter 4</i>	Chapter 9 Real Numbers and Right Triangles -Square Roots -Simplifying Square Roots -The Pythagorean Theorem -Real numbers -The Distance and Midpoint Formulas Chapter 10 Measurement, Area, and Volume -Triangles -Polygons and Quadrilaterals -Areas of Parallelograms and Trapezoids -Circumference and Area of a Circle -Surface Areas of Prisms and Cylinders -Surface Areas of Pyramids and Cones -Volumes of Prisms and Cylinders -Volumes of Pyramids and Cones Chapter 13 Angle Relationships and Transformations -Angle Relationships -Angles and Parallel Lines -Angles and Polygons -Translations -Reflections and Symmetry -Rotations and Symmetry -Dilations