


























Grade 7 Math

Month	Content	Skills
August September	Assessment of mathematical skills A. Patterns and Relationships <ol style="list-style-type: none"> Patterns Exponents and Scientific Notation Order of Operations and Rational Numbers B. Algebraic Thinking <ol style="list-style-type: none"> Algebraic Expressions Solutions of Equations One-Step Equations 	A. Patterns and Relationships <ol style="list-style-type: none"> Identify and extend patterns Represent numbers using exponents and scientific notation Simplify expressions using order of operations and properties of rational numbers B. Algebraic Thinking <ol style="list-style-type: none"> a. Translate words into algebraic expressions b. Evaluate and simplify algebraic expressions Determine if a number is a solution of an equation Solve one-step equations using add, subtract, multiply, and divide
October	A. Integers <ol style="list-style-type: none"> Integers One-Step Equations with Integers Prime Factorization/GCF/LCM B. Rational Numbers <ol style="list-style-type: none"> Decimals, fractions, mixed Numbers Number Line One-Step Equations with Decimals and Fractions 	A. Integers <ol style="list-style-type: none"> a. Compare and order integers and absolute value b. Solve add, subtract, multiply and divide problems with integers Solve one-step equations with integers Find the prime factorization and use to find GCF and LCM B. Rational Numbers <ol style="list-style-type: none"> a. Estimate sums, differences, products, and quotients using decimals, fractions, and mixed numbers b. Solve add, subtract, multiply, and divide problems using decimals with integers, fractions and mixed numbers Identify and locate rational numbers on number line Solve one-step equations with decimals and fractions
November	A. Graphing and Functions <ol style="list-style-type: none"> Coordinate Graphing Patterns 	A. Graphing and Functions <ol style="list-style-type: none"> a. Identify and graph ordered pairs on a coordinate plane and from function tables

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	3. Linear Equations	1. b. Relate graphs to real life situations  2. Identify patterns to complete sequences using function tables  3. Identify and graph linear equations 
December	A. Ratio and Proportion 1. Unit Rates, Ratio, and Proportion 2. Slope CHRISTMAS BREAK-----	A. Ratio and Proportion 1. a. Identify, compare, write, and solve ratios and proportions  1. b. Find and compare unit rates  2. Determine the slope of a line to recognize rates of change 
January	A. Ratio and Proportion (cont'd) 1. Similarity and Scale Factor 2. Units of Measurement B. Percents 1. Fractions and Decimals 2. Estimating 3. Percent Change	A. Ratio and Proportion 1. Use ratio and proportion to determine similarity and scale  2. Identify and convert customary units of measurement  B. Percents 1. Recognize equivalent fractions, decimal, and percents  2. Estimate values using percents  3. Solve problems involving percent and percent of change 
February	A. Data Analysis 1. Frequency tables, bar graphs, histograms, line plots 2. Circle Graphs 3. Scatter Plots 4. Mean, median, mode B. Geometry 1. Geometric figures 2. Angles, angle pairs, lines, circles 3. Polygons, triangles, quadrilaterals	A. Data Analysis 1. Organize and interpret data in frequency tables, bar graphs, histograms, and line plots  2. Read, interpret, and create circle graphs and line graphs from data  3. Analyze and create scatter plots from data  4. Calculate mean, median, mode, and range for a data set  B. Geometry 1. Identify and describe geometric figures  2. Identify angles, angle pairs, lines, and circles  3. Identify and classify polygons, triangles, and quadrilaterals  C. Transformations 1. Solve problems involving congruent polygons 

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	<p>C. Transformations</p> <ol style="list-style-type: none"> 1. Congruent Polygons 2. Translations, reflections, rotations 3. Symmetry 	<ol style="list-style-type: none"> 2. Identify and graph translations, reflections, and rotations 3. Identify symmetry in figures
<p>March</p>	<p>A. Measurement</p> <ol style="list-style-type: none"> 1. Perimeter 2. Area 3. Irregular Shapes 4. Square Roots <p>B. Three Dimensional Shapes</p> <ol style="list-style-type: none"> 1. Volume 2. Surface Area <p>C. ISAT Preparation and Review (Include some simple probability from list below)</p> <p>D. Probability</p> <ol style="list-style-type: none"> 1. Estimate 2. Possible Outcomes 3. Theoretical Probability 4. Independent/Dependent Events 5. Combinations/Permutations 	<p>A. Measurement</p> <ol style="list-style-type: none"> 1. Find perimeter of polygons and circumference 2. Determine area of polygons and circles 3. Find area of irregular shapes 4. Determine square roots of numbers <p>B. Three Dimensional Shapes</p> <ol style="list-style-type: none"> 1. Find the volume of rectangular prisms, cylinders, pyramids, and cones 2. Determine the surface area of rectangular prisms and cylinders <p>C. ISAT Preparation and Review Practice ISAT questions in test conditions</p> <p>D. Probability</p> <ol style="list-style-type: none"> 1. Conduct experiments to estimate probability 2. Make lists to determine possible outcomes 3. Determine the theoretical probability of events 4. Find the probability of independent and dependent events 5. Determine the number of possible combinations and permutations
<p>April</p>	<p>A. Fractions</p> <ol style="list-style-type: none"> 1. Add/Subtract Fractions and Mixed Numbers 2. Multiply/Divide Fractions (by hand) <p>B. Geometry</p> <ol style="list-style-type: none"> 1. Surface Area/Volume 	<p>A. Fractions</p> <ol style="list-style-type: none"> 1. Add/Subtract Fractions and Mixed Numbers(includes using fraction manipulatives and by hand) 2. Multiply/Divide Fractions (by hand) <p>B. Geometry</p> <ol style="list-style-type: none"> 1. Find the surface area and volume of 3-D shapes beyond rectangular

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	2. Drawings of 3-D figures C. Algebra 1. Multi-step equations 2. Inequalities 3. Pythagorean Theorem	prism (cylinders, pyramids, cones)  2. Drawings of 3-D figures (top, front, side views and isometric drawings) C. Algebra 1. Solve two-step equations, multiple step equations, and equations with variable on both sides  2.a. Read, write, and graph inequalities  2.b. Solve inequalities using add, subtract, multiplication, and division  2.c. Solve two-step inequalities  3. Solve problems using Pythagorean Theorem, solving for a, b, or c sides. 
May	***Please refer to topics listed in month of April***	