

MATH: Grade 8

Month	Performance Indicators	Concepts	Skills	Assessments
September	8.N.1 8.N.2 8.A.1 8.A.2 8.A.6 8.A.16 7.G.8 7.G.9	Unit 1 Algebra –Old and New	<ul style="list-style-type: none"> ▪ Basic operations with integers ▪ Powers & Exponents, Integral exponents ▪ Multiplication/Division of Powers with the same base ▪ Evaluating Expressions using Order of Operations 1-3 ▪ 4-step plan for problem-solving 1-1 ▪ Solving one-step equations with whole numbers (addition & subtraction)1-4 ▪ Solving one-step equations with Rational Numbers ▪ Solving one-step equations with whole numbers (multiplication & division) 1-5 ▪ Translating verbal Expressions & Equations 1-6 ▪ Solving two-step equations with Rationals Using Inverse operations ▪ Solving/Graphing one-step inequalities ▪ Review Pythagorean Theorem 	<ul style="list-style-type: none"> ▪ People Search ▪ Magic Squares ▪ Weekly quizzes ▪ Daily starter problems/Mental Math ▪ Skills Test- Integers ▪ ET #1-Integers Skills Test ▪ ET #2-Solving Multi-step Equations Tutorial and Test ▪ People Search
October	8.A.6 8.A.7 8.A.8	Unit 1-Con't Unit 2- Polynomials	<ul style="list-style-type: none"> ▪ Review Graphing in the Coordinate System ▪ More Solving Equations with Rational numbers ▪ Identify Properties of Rational Numbers ▪ Simplifying Polynomials/Operations with Polynomials ▪ Solving Polynomial Equations ▪ Applying Distributive Property ▪ Defining Variables to Solve Problems ▪ Solving Equations with Variables on both sides ▪ Read and Write inequality statements ▪ Solve and graph inequalities on a number line 	<ul style="list-style-type: none"> ▪ Daily Starter Problems/Mental Math ▪ Weekly Quizzes ▪ Coordinate Picture Graphs ▪ ET #3 –Coordinate Geometry Project ▪ ET #4-Vocabulary

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November	8.N.2 8.A.5 8.A.6 8.A.7 8.A.8 8.A.9	Unit 2 –Con’t Polynomials	<ul style="list-style-type: none"> ▪ algebra problem solving ▪ Degree/standard form of a polynomial ▪ Adding/subtracting polynomials ▪ Multiplying a monomial by a polynomial ▪ Multiplying binomials ▪ Dividing a polynomial by a monomial 	<p>Daily starter problems/Mental Math Weekly Quizzes (cumulative)</p> <p><i>Unit 2 test</i></p> <p>ET #5- Skills Test decimals ET #6 – Polynomials tutorial and retest</p>
December	8.N.3 8.N.4 8.N.5 7.M.7	Unit 3 Percents		<ul style="list-style-type: none"> ▪ Daily starter problems/mental Math ▪ Weekly Quizzes ▪ <i>Smarties</i> Lab Assessment ▪ <i>Futuama</i> Percent of Change Project ▪ <i>ET #7A-Percent Tutorial</i> ▪ <i>ET# 7B-Futurama Menu Project</i>

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January	8.A.1 8.A.5 8.A.2 8.A.10 8.A.11 8.M.1	<p style="text-align: center;">Unit 4 Real Numbers + Factoring</p>	<ul style="list-style-type: none"> ▪ Introduction to Rational/Real Numbers ▪ Comparing Sets of Numbers using Venn ▪ Solving one and two step equations with rational numbers (Decimals, Fractions and Mixed #s) – RECAP ▪ Solve equation/proportions to convert to equivalent measures(metric and customary)—EX. Fahrenheit-Celsius ▪ Factoring polynomials using GCF ▪ Factoring Using the Distributive Property ▪ Factoring Trinomials ▪ Translate Verbal sentences into algebraic Inequalities ▪ More solving and graphing Inequalities ▪ Graphing Compound Inequalities, Solving and graphing Inequalities— 	<ul style="list-style-type: none"> ▪ Daily starter problems/mental math ▪ Weekly Quizzes ▪ ▪ Unit Test 4 ▪ ▪ <i>PREP FOR State Assessment in March</i> ▪ <i>ET #8-Vocabulary</i>
February	8.A.12 8.G.1 8.G.2 8.G.3 8.G.4 8.G.5 8.G.6 8.G.7 8.G.8 8.G.9 8.G.10 8.G.11 8.G.12	<p style="text-align: center;">Unit 5 Geometry: Investigating Patterns</p>	<ul style="list-style-type: none"> ▪ Identify parallel lines & angles formed by parallel lines cut by transversal ▪ Find measures of missing angles algebraically ▪ Identify Special angle Pairs/with Algebra ▪ Classifying Triangles by sides & angles ▪ Classifying quadrilaterals (Venn) ▪ Line symmetry/ Rotational Symmetry ▪ Point Symmetry ▪ Reflections & Rotations using the coordinate plane ▪ Translations ▪ Dilations ▪ Properties preserved under transformations 	<ul style="list-style-type: none"> ▪ Daily starter problems ▪ Weekly Quizzes ▪ Skills Test -Fractions ▪ <i>Tessellation Project</i> ▪ Performance assessments ▪ Unit 5 Test ▪ ET # 9-Factoring Tutorial and test ▪ ET #10A & B – Transformations and Geometry ▪ ET #10C- Tessellation Project

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February-March	8.M.1 8.A.3 8.A.4	Unit 6 Patterns/Functions <i>Pre-Assessment</i>	<ul style="list-style-type: none"> ▪ Sequences arithmetic/geometric ▪ Recap + integers(mult/Dividing) ▪ Functions and Complete Table of Values ▪ Understanding Patterns of Direct and Indirect Variations ▪ Graphing Linear Functions using Table of Values ▪ Using Formulas – Fahrenheit/Celsius conversion, currency conversion 	<ul style="list-style-type: none"> ▪ <i>Tower of Brahma</i> Activity ▪ Using Graphing Calculator ▪ ET #11- Skills Test- Fractions ▪ ET # 12- vocabulary
March-April	8.A.15 8.A.16 8.A.17 8.A.18 8.A.19	Unit 6 Patterns/Functions <i>Post-Assessment</i>	<ul style="list-style-type: none"> ▪ Slope of a line,, graphing linear equations using slope intercept form ▪ Graphing systems of equations ▪ Solving equations with two variables 	<ul style="list-style-type: none"> ▪ <i>Unit 6-Test</i> ▪ <i>ET # 13- Functions</i> ▪ <i>ET # 14- Skills Test</i>
May-June	8.A.13 8.A.14 8.A.21 8.A.22 8.A.23	Unit 7 Inequalities and Constructions	<ul style="list-style-type: none"> ▪ Solve multi-step inequalities and graph the solution on the number line ▪ Solve & graph linear Inequalities <p>Constructions:</p> <ul style="list-style-type: none"> ▪ congruent segments and angles ▪ bisecting segments and angles ▪ a regular inscribed hexagon ▪ inscribed Square ▪ line perpendicular to a given segment from a point not on a line 	<ul style="list-style-type: none"> ▪ Prep for Final Exam ▪ Graphing Calculator Activity ET # 15- Constructions Alien Project ET # 16- vocabulary