

Grade 8 Curriculum Map  
Revised Sept 2009

Performance Indicator Code	Performance Indicator	Instructional Period
7N5	REVIEW: Write numbers in scientific notation	<b>September - October</b>
7N6	REVIEW: Translate numbers from scientific notation into standard form	
7N7	REVIEW: Compare numbers written in scientific notation	
7N12	REVIEW: Add, subtract, multiply and divide integers	
7N14	REVIEW: Develop a conceptual understanding of negative and zero exponents	
7A4*	REVIEW: Solve multi-step equations by combining like terms, using the distributive property, or moving variables to one side of the equation	
8N1	Develop and apply the laws of exponents for multiplication and division	
8N2	Evaluate expressions with integral exponents	
8A1	Translate verbal sentences into algebraic inequalities	
8A2	Write verbal expressions that match given mathematical expressions.	
8A13	Solve multi-step inequalities and graph the solution set on a number line	
8A14	Solve linear inequalities by combining like terms, using the distributive property, or moving variables to one side of the inequality (include multiplication or division by a negative number)	
8G19	Graph the solution set of an inequality on a number line	

\*Indicates Post March from previous year

\*\*Indicates May-June from previous year

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Performance Indicator Code	Performance Indicator	Instructional Period
7M1**	Calculate distance using a map scale	<b>November</b>
7M5**	Calculate unit price using proportions	
7M6**	Compare unit prices	
7M7**	Convert money between different currencies with the use of an exchange rate table and a calculator	
8M1	Solve equations/proportions to convert to equivalent measurements within metric and customary measurement systems. Note: also allow Fahrenheit to Celsius and vice versa	
8N3	Read, write, and identify percents less than 1% and greater than 100%	
8N4	Apply percents to: Tax, percent increase/decrease, simple interest, sale price, commission, interest rates, and gratuities	
8N5	Estimate a percent of a quantity, given an application	

Performance Indicator Code	Performance Indicator	Instructional Period
8G1	Identify pairs of vertical angles as congruent	<b>December</b>
8G2	Identify pairs of supplementary and complementary angles	
8G3	Calculate the missing angle in a supplementary or complementary pair	
8G4	Determine angle pair relationship when given two parallel lines cut by a transversal	
8G5	Calculate the missing angle measurements when given two parallel lines cut by a transversal	
8G6	Calculate the missing angle measurements when given two intersecting lines and an angle	
8A12	Apply algebra to determine the measure of angles formed by or contained in parallel lines cut by a transversal and by intersecting lines	

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Performance Indicator Code	Performance Indicator	Instructional Period
8A5	Use physical models to perform operations with polynomials	<b>January</b>
8A6	Multiply and divide monomials	
8A7	Add and subtract polynomials (integer coefficients)	
8A8	Multiply a binomial by a monomial or a binomial (integer coefficients)	
8A9	Divide a polynomial by a monomial (integer coefficients) NOTE: The degree of the denominator is less than or equal to the degree of the numerator for all variables	
8A10	Factor algebraic expressions using the GCF	
8A11	Factor a trinomial in the form $ax^2 + bx + c$ , $a=1$ and $c$ having no more than 3 sets of factors	
7A2*	Add and subtract monomials with exponents of one	
7A3*	Identify a polynomial as an algebraic expression containing one or more terms	

Performance Indicator Code	Performance Indicator	Instructional Period
8G7	Describe and identify transformations in the plane, using proper function notation (rotations, reflections, translations, and dilations)	<b>February</b>
8G8	Draw the image of a figure under rotations of 90 and 180 degrees	
8G9	Draw the image of a figure under a reflection over a given line	
8G10	Draw the image of a figure under a translation	
8G11	Draw the image of a figure under a dilation	
8G12	Identify the properties preserved and not preserved under a reflection, rotation, translation, and dilation	
7G5*	Identify the right angle, hypotenuse, and legs of a right triangle	
7G6*	Explore the relationships between the lengths of the three sides of a right triangle to develop the Pythagorean Theorem	
7G8*	Use the Pythagorean Theorem to determine the unknown length of a side of a right triangle	
7G9*	Determine whether a given triangle is a right triangle by applying the Pythagorean Theorem and using a calculator	

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8A3	Describe a situation involving relationships that matches a given graph	<b>March</b>
8A4	Create a graph given a description or an expression for a situation involving a linear or nonlinear relationship	
8A15	Understand the numerical information can be represented in multiple ways: arithmetically, algebraically, and graphically	
8A16	Find a set of ordered pairs to satisfy a given linear numerical pattern (expressed algebraically); then plot the ordered pairs and draw the line	
8G13	Determine the slope of a line from a graph and explain the meaning of slope as a constant rate of change	
8G14	Determine the y-intercept of a line from a graph and be able to explain the y-intercept	
8G15	Graph a line using a table of values	
8G16	Determine the equation of a line given the slope and the y-intercept	
8G17	Graph a line from an equation in slope-intercept form ( $y = mx + b$ )	
8G18	Solve systems of equations graphically (only linear, integral solutions, $y = mx + b$ format, no vertical/horizontal lines)	
8G20	Distinguish between linear and nonlinear equations $ax^2 + bx + c$ ; $a = 1$ (only graphically)	
8G21	Recognize the characteristics of quadratics in tables, graphs, equations, and situations	
7A7*	Draw the graphic representation of a pattern from an equation or from a table of values	
7A8*	Create algebraic patterns using charts/tables, graphs, equations, and expressions	
7A9**	Build a pattern to develop a rule for determining the sum of the interior angles of polygons	
7A10**	Write an equation to represent a function from a table of values	

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Performance Indicator Code	Performance Indicator	Instructional Period
ALL of the above	<b>REVIEW</b>	<b>April</b>

Performance Indicator Code	Performance Indicator	Instructional Period
8A17	Define and use correct terminology when referring to function (domain and range)	<b>May - June</b>
8A18	Determine if a relation is a function	
8A19	Interpret multiple representations using equation, table of values, and graph	
8G0	Construct the following using a straight edge and compass: Segment congruent to a segment; angle congruent to an angle; perpendicular bisector; and angle bisector	

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