	CURRICULUM *End Product of Learning, "What" You Teach*			INSTRUCTION *Means to the End Product, "How" You Teach*	ASSESSMENT *Validation to Revise Curriculum & Instruction*
TIME FRAME [By Date/Week/Month]	**STANDARD OR BENCHMARK**	**CONTENT:** **What we want students to "KNOW".**	**SKILL:** **What we want students to "DO".**	**Varied Teaching/Learning Strategies** **Resources/Comments**	**Varied Classroom Assessment Strategies**

September	Chapter 1
	
	Variables, Expressions, and Integers
	(pp. 1–61)
	
	CCSS
	
	7.EE.1
	
	7.NS.1
	  *7.NS.1a
	  *7.NS.1b
	7.NS.2
	  *7.NS.2a
	  *7.NS.2b
	7.NS.3
	
	6.7.04
	Represent repeated factors using exponents.
	
	6.7.05
	Order and compare integers, terminating decimals, fractions, and mixed numbers.
	
	6.7.06
	Identify and locate integers, decimals, and fractions/mixed numbers on a number line, and estimate the locations of square roots.
	
	6.7.08
	Solve problems and number sentences involving addition, subtraction, multiplication, and division using integers, fractions, and decimals.
	
	6.7.09
	Identify and apply order of
		Students will:
		
		- write and evaluate variable expressions.
		- perform operations with integers.
		- plot points in a coordinate plane.
			Students will be able to:
			
			- evaluate integers with powers and exponents following the order of operations
			- evaluate expressions using simple exponents
			- extend their knowledge to include integers with an understanding of absolute value
			- evaluate integers using a number line and mental math computation
			- plot coordinates on a coordinate plane
				(pp. 1–61)
				
				Pre-Algebra Textbook
				
				Challenge Activities
				
				Brain Pop
				
				Khan Academy
				
				Independent Work
				
				Cooperative Group Work
				
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				Classzone.com
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operations to simplify numeric expressions involving whole numbers (including exponents), fractions, and decimals.

8.7.02
Write an expression using variables to represent unknown quantities.

8.7.05
Evaluate or simplify algebraic expressions with one or more integer variable values (e.g., $a2 + b$ for $a = 3$ and $b = –4$).

9.7.05
Graph points and identify coordinates of points on the Cartesian coordinate plane (all four quadrants).

| September/ October | Chapter 2

Properties of Real Numbers (pp. 62–127)

CCSS

7.EE.1
7.NS.1
*7.NS.1a
*7.NS.1b
*7.NS.1c
7.NS.2
*7.NS.2a
*7.NS.2b
7.NS.3

6.7.08
Solve problems and number | Students will:
- study addition, multiplication and distributive properties.
- simplify variable expressions.
- solve equations using mental math.
- solve equations using addition, subtraction, multiplication, and division.
- solve equations with decimals. | Students will be able to:
- use mathematical properties to simplify variable expressions.
- write and solve one-step equations.
- perform operations with positive and negative integers.
- identify the property being represented. | (pp. 62-127)

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sentences involving addition, subtraction, multiplication, and division using integers, fractions, and decimals.

6.7.09
Identify and apply order of operations to simplify numeric expressions involving whole numbers (including exponents), fractions, and decimals.

6.7.10
Identify and apply the following properties of operations with rational numbers: • the commutative and associative properties for addition and multiplication; • the distributive property; • the additive and multiplicative identity properties; • the additive and multiplicative inverse properties; and • the multiplicative property of zero.

8.7.03
Simplify algebraic expressions by identifying and combining like terms.

8.7.10
Represent and analyze problems with linear equations and inequalities.

8.7.11
Solve linear equations in one variable (e.g., 2x + 3 = 13) and inequalities involving < or > (e.g., 2x<6, x+7>10).

| October | Chapter 3 | Students will study: | Students will be able to: | (Pg. 128-199) | |

	Multi-Step Equations and Inequalities (pp. 128–199) 7.EE.2 7.EE.4 *7.EE.4b 8.7.03 Simplify algebraic expressions by identifying and combining like terms. 8.7.09 Identify, graph, and interpret inequalities on a number line. 8.7.11 Solve linear equations in one variable (e.g., $2x + 3 = 13$) and inequalities involving < or > (e.g., $2x<6$, $x+7>10$).	- writing and solving two step equations - using the distributive property to solve equations - writing and solving inequalities - graphing inequalities on a number line	- isolate variables. - use the inverse operation. - write and solve inequalities. - complete a multi-step equation. - identify like terms, constants, coefficients, and like terms. - solve equations with variables on both sides.	Pre-Algebra Textbook Challenge Activities Brain Pop Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Test Quizzes Homework Projects Participation Informal Observations Discussion

October/ November	Chapter 4 Factors, Fractions and Exponents (pp. 168–265) **CCSS** 6.7.03 Recognize, translate between, and apply multiple representations of rational numbers (decimals, fractions, mixed numbers, and percents less than 100%). 6.7.04 Represent repeated factors using exponents. 6.7.05 Order and compare integers, terminating decimals, fractions, and mixed numbers. 6.7.07 Solve problems involving descriptions of numbers, including characteristics and relationships (e.g., square numbers, prime/composite, prime factorization, greatest common factor, least common multiple). 6.7.08 Solve problems and number sentences involving addition, subtraction, multiplication, and division using integers, fractions, and decimals.	Students will: - factor numbers and binomials. - find the common factors and common multiples. - simplify and compare fractions. - multiply and divide powers. - write numbers in scientific notation.	Students will be able to: - use prime factorization to find LCM and GCF. - identify equivalent fractions. - use scientific notation, writing numbers in standard form, product form, and scientific notation. - use rules of exponents.	(Pg. 168-265) Pre-Algebra Textbook Challenge Activities Brain Pop Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Test Quizzes Homework Projects Participation Informal Observations Discussion
November/ December	Chapter 5 Rational Numbers and Equations (pp. 216–265) **CCSS** 7.EE.1 7.EE.3	Students will: - identify rational numbers. - write fractions as a decimal and decimals as fractions. - perform operations with fractions and mixed numbers.	Students will be able to: - add and subtract fractions with the same and/or different denominators. - multiply fractions. - divide fractions by using the	(Pg. 216-265) Pre-Algebra Textbook Challenge Activities Brain Pop	Test Quizzes Homework Projects Participation

7.EE.4
  * 7.EE.4b
 	
7.NS.1
  * 7.NS.1c
  * 7.NS.1d
7.NS.2
  * 7.NS.2c
	- solve equation and
	    inequalities with
	    rational numbers.
		reciprocal.
		- use multiplicative
		    inverses to solve
		    an equation.
			Khan Academy
			
			Independent Work
			
			Cooperative Group Work
			
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6.7.03 Recognize, translate between, and apply multiple representations of rational numbers (decimals, fractions, mixed numbers, and percents less than 100%). 6.7.07 Solve problems involving descriptions of numbers, including characteristics and relationships (e.g., square numbers, prime/composite, prime factorization, greatest common factor, least common multiple). 6.7.08 Solve problems and number sentences involving addition, subtraction, multiplication, and division using integers, fractions, and decimals. 6.7.10 Identify and apply the following properties of operations with rational numbers: • the commutative and associative properties for addition and multiplication; • the distributive property; • the additive and multiplicative identity properties; • the additive and multiplicative inverse properties; and • the multiplicative property of zero. 8.7.03 Simplify algebraic				

	expressions by identifying and combining like terms. 8.7.11 Solve linear equations in one variable (e.g., 2x + 3 = 13) and inequalities involving < or > (e.g., 2x<6, x+7>10).				

December/ January	Chapter 6
	
	Ratio, Proportion, and Probability
	(pp. 266–325)
	
	CCSS
	
	7.RP.1
	7.RP.2
	  * 7.RP.2a
	  * 7.RP.2b
	  * 7.RP.2c
	
	7.G.1
	
	7.SP.5
	7.SP.6
	7.SP.8
	  * 7.SP.8b
	
	6.7.05
	Order and compare integers, terminating decimals, fractions, and mixed numbers.
	
	6.7.14
	Create and explain ratios that represent a given situation.
	
	6.7.15
	Use proportional reasoning to model and solve problems.
	
	7.7.06
	Solve problems involving scale drawings and maps.
	
	8.7.05
	Evaluate or simplify algebraic expressions with one or more
		Students will:
		- find ratios and unit rates.
		- write and solve proportions.
		- identify similar and congruent figures.
		- find unknown side lengths of similar figures.
		- find probabilities.
			Students will be able to:
			- solve proportions.
			- use conversions.
			- solve proportions using cross products.
			- find distances using scales and scale drawings.
			- find the ratio of corresponding side lengths of similar figures.
			- use the counting principle to count possibilities.
			- find the probability of an event.
				(Pg. 266-325)
				
				Pre-Algebra Textbook
				
				Challenge Activities
				
				Brain Pop
				
				Khan Academy
				
				Independent Work
				
				Cooperative Group Work
				
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				Classzone.com
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					Informal Observations
					
					Discussion

	integer variable values (e.g., a2 + b for a = 3 and b = –4). 8.7.12 Solve word problems involving unknown quantities. 9.7.14 Determine if figures are similar, and identify relationships between corresponding parts of similar figures. 10.7.06 Solve problems involving the probability of a simple or compound event, including representing the probability as a fraction, decimal, or percent. 10.7.07 Represent all possible outcomes for simple events. 10.7.08 Solve simple problems involving the number of ways objects can be arranged (permutations and combinations).				
January	Chapter 7 Percents (pp. 326–380) **CCSS** 7.RP.3 6.7.03 Recognize, translate between, and apply multiple representations of rational numbers (decimals, fractions, mixed numbers, and percents less than 100%). 6.7.15 Use proportional reasoning to model and solve problems.	Students will: - find the percent of the number. - solve percentage problems. - find the percent of change in a quantity. - find markups, discounts, sales tax, and tips. - calculate interest earned and account balances.	Students will be able to: - use fractions to find the prevent of a number. - use proportions to solve percent problems. - use decimals to find the percent of a number. - use an equation to solve percent problems. - solve problems involving percent of change. - apply percent change to real life situations.	(Pg. 326-380) Pre-Algebra Textbook Challenge Activities Brain Pop Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Test Quizzes Homework Projects Participation Informal Observations Discussion

	6.7.16 Read, write, recognize, model, and interpret percents from 0% to 100%. 6.7.17 Solve number sentences and problems involving fractions, decimals, and percents (e.g., 50% of 10 is the same as 1/2 of 10 is the same as 0.5x10, sales tax, tips, interest, discounts).				
February	Chapter 8 Linear Functions (pp. 382-447) **CCSS** 8.7.07 Represent linear equations and quantitative relationships on a rectangular coordinate system, and interpret the meaning of a specific part of a graph. 8.7.08 Translate between different representations (table, written, graphical, or pictorial) of whole number relationships and linear expressions. 8.7.10 Represent and analyze problems with linear equations and inequalities.	Students will: - represent relations and functions. - find and interpret slopes of lines. - write and graph linear equations with two variables. - graph and solve systems of linear equations. - graph linear inequalities with two variables.	Students will be able to: - use graphs and mapping diagrams to represent relations. - find solutions of linear equations in two variables. - find the intercepts of the graph of an equation. - identify the slope and y-intercept of the line. - write an equation of a line that is parallel of perpendicular to a given line. - use function notation. - solve linear systems in two variables by graphing.	(pp. 382-447) Pre-Algebra Textbook Challenge Activities Brain Pop Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Test Quizzes Homework Projects Participation Informal Observations Discussion

March/ April	Chapter 9 Real Numbers and Right Triangles (pp. 450-508) **CCSS** 6.7.05 Order and compare integers, terminating decimals, fractions, and mixed numbers. 6.7.06 Identify and locate integers, decimals, and fractions/mixed numbers on a number line, and estimate the locations of square roots. 6.7.13 Estimate the square root of a number less than 1,000 between two whole numbers (e.g., √41 is between 6 and 7) 8.7.04 Recognize equivalent forms of algebraic expressions. 8.7.05 Evaluate or simplify algebraic expressions with one or more integer variable values (e.g., $a2 + b$ for $a = 3$ and $b = -4$). 9.7.03 Solve problems using properties of triangles and quadrilaterals (e.g., opposite sides of a parallelogram are congruent). 9.7.15 Determine the distance between two points on a horizontal or vertical number line.	Students will: - use square roots. - solve problems using Pythagorean theory. - compare and order real numbers.	Students will be able to: - - find and approximate square roots. - simplify radical expressions. - use the Pythagorean Theorem to find unknown side lengths of rights triangles. - use the distance and midpoint formulas. - find unknown side lengths in special right triangles. - use the tangent, sine, and cosine ratios to find unknown lengths in a right triangle.	(pp. 450-508) Pre-Algebra Textbook Challenge Activities Brain Pop Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Test Quizzes Homework Projects Participation Informal Observations Discussion
April	Chapter 10 Measurement, Area, and Volume	Students will: - classify triangles and polygons.	Students will be able to: - find unknown angle measures	(pp. 508-569) Pre-Algebra Textbook	Test Quizzes

(pp. 508-569) **CCSS** 7.G.1 7.G.2 7.G.3 7.G.4 7.G.5 7.G.6 7.7.02 Solve problems involving the perimeter and area of polygons and composite figures using diagrams, models, and grids or by measuring or using given formulas (may include sketching a figure from its description). 7.7.04 Determine the volume and surface area of a right rectangular prism using an appropriate formula or strategy. 9.7.01 Classify, describe, and sketch regular and irregular two–dimensional shapes according to the number of sides, length of sides, number of vertices, and interior angles. 9.7.02 Solve problems involving two– and three–dimensional shapes. 9.7.03 Solve problems using properties of triangles and quadrilaterals (e.g., opposite sides of a parallelogram are congruent). 9.7.04 Identify, describe, and determine the radius and diameter of a circle.	- find area of parallelograms and trapezoids. - find circumference and area of circles. - find surface area and volume of solids.	and classify triangles. - classify polygons and quadrilaterals. - find the areas of parallelograms and trapezoids. - use the formulas to fins the circumference and area of circle. - use the formulas to find the area of different quadrilaterals. - use formulas to find the surface area and volume of prisms, cylinders, pyramids, and cones.	Challenge Activities Brain Pop Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Homework Projects Participation Informal Observations Discussion

| April/ May | Chapter 11

Data Analysis and Probability (pp. 578-641)

CCSS

7.SP.1
7.SP.2
7.SP.3
7.SP.4
7.SP.5
7.SP.6
7.SP.7
  * 7.SP.7a
  * 7.SP.7b
7.SP.8
  * 7.SP.8a
  * 7.SP.8b
  * 7.SP.8c

8.7.08
Translate between different representations (table, written, graphical, or pictorial) of whole number relationships and linear expressions.

10.7.01
Read, interpret, and make predictions from data represented in a bar graph, line (dot) plot, Venn diagram (with two circles), chart/table, line graph, scatter plot, circle graph, or histogram.

10.7.02
Compare different representations of the same data.

10.7.05
Determine and use the mode, range, median, and mean to interpret data.

10.7.06
Solve problems involving the probability of a simple or | Students will:
- make histograms and box and whisker plots.
- choose appropriate displays for data.
- collect and interpret data.
- find permutations and combinations.
- find probabilities of disjointed and overlapping events.
- find probabilities of dependent and independent events. | Students will be able to:
- collect data and display it on graph.
- identify populations and sampling methods.
- make conclusions about populations using surveys.
- use permutation s and combinations to count possibilities.
- find the probability with different scenarios occurring. | (pp. 578-641)

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	compound event, including representing the probability as a fraction, decimal, or percent. 10.7.08 Solve simple problems involving the number of ways objects can be arranged (permutations and combinations).				
May	Chapter 12 Polynomials and Nonlinear Functions (pp. 648-699) **C.C.S.S.** 6.7.04 Represent repeated factors using exponents. 8.7.01 Determine a missing term in a sequence, extend a sequence, and construct and identify a rule that can generate the terms of an arithmetic or geometric sequence. 8.7.03 Simplify algebraic expressions by identifying and combining like terms. 8.7.07 Represent linear equations and quantitative relationships on a rectangular coordinate system, and interpret the meaning of a specific part of a graph.	Students will: - classify and simplify polynomials. - add, subtract, and multiply polynomials. - use power of a product, product of a quotient, and power of power properties.	Students will be able to: - identify polynomials and write them in standard form. - use different operation with polynomials. - multiply binomials. - simplify powers of products and quotients. - graph quadratic functions. - solve problems with exponential growth and decay. - extend sequences.	(pp. 648-699) Pre-Algebra Textbook Challenge Activities Brain Pop Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Test Quizzes Homework Projects Participation Informal Observations Discussion
May/June	Chapter 13 Angle Relationships and Transformations (pp. 706-757) **C.C.S.S.**	Students will: - classify special angle pairs. - identify angles formed by a transversal intersecting two lines. - find measures of interior	Students will be able to: - identify and find measures of complementary, supplementary, and vertical angles.	(pp. 706-757) Pre-Algebra Textbook Challenge Activities Brain Pop	Test Quizzes Homework Projects

Course/Subject: McDougal Littell Pre Algebra		**CURRICULUM MAP**		Grade: 7
9.7.02 Solve problems involving two- and three- dimensional shapes. 9.7.08 Identify or analyze relationships of angles formed by intersecting lines. 9.7.07 Analyze the results of a combination of transformations. 9.7.08 Identify or analyze relationships of angles formed by intersecting lines. 9.7.10 Solve problems involving complementary and supplementary angles.	and exterior angles of polygons. - transform figures in a coordinate plane. - describe line symmetry and rotational symmetry.	- translate figures in a coordinate plane. - reflect figures in a coordinate plane. - rotate and dilate figures in a coordinate plane.	Khan Academy Independent Work Cooperative Group Work Study Guide Investigation Classzone.com	Participation Informal Observations Discussion

Notes: All CCSS addressed.

RED = ABOVE COMMON CORE LEVEL   GREEN = BELOW COMMON CORE LEVEL   BLACK = ON LEVEL