

6th Grade Math Pacing Guide

Board Approved: December 12, 2016

#	CCSS	Unit 1: Data & Decimals	Recommended Pacing: (Instructional Days):	Go Math Chapters Covered:	Completed
		Student Learning Objective:	Go Math Lessons		
1	6.SP.1; 6.SP.2; 6.SP.3; 6.SP.5c,d	Calculate, compare, and interpret measures of center and variability in a data set to answer a statistical question. (Including median, mean, interquartile range, mean absolute deviation and overall pattern).	12.1 12.6 13.4		
2	6.SP.4; 6.SP.5a,b	Display numerical data in plots on the number line (including dot plots, histograms, and box plots) and summarize in relation to their context.	12.3 12.4 13.2 13.7		
3	6.RP.3c	Write fractions and decimals as percent.	5.3		
4	6.NS.2; 6.NS.3	Fluently add, subtract, multiply and divide multi-digit decimals and whole numbers using standard algorithms.	1.6 1.7 1.8 1.9		
5	6.EE.2	Read, write, and evaluate expressions in which letters stand for numbers (Including formulas that arise from real-world contexts).	7.3 7.5		
6	6.NS.6c	Locate positive rational numbers on the horizontal number line.	3.3		

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#	CCSS	Unit 2: Fractions		Completed
		Student Learning Objective:	Go Math Lessons	
	6.EE.3; 6.NS.4	Apply the properties of operations to generate equivalent expressions (Including the distributive property; for example, express $36 + 8$ as $4(9 + 2)$ and $y + y + y = 3y$).	7.8 1.4	
	6.NS.4	Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two numbers less than or equal to 12.	1.3 1.4	
	6.EE.1	Write and evaluate numerical expressions involving whole number exponents.	7.2	
	6.NS.1	Compute quotients of fractions.	2.7	
	6.EE.2	Read, write, and evaluate expressions in which letters stand for numbers (Including formulas that arise from real-world contexts).	7.3 7.5	
	6.NS.1	Construct visual fraction models to represent quotients and explain the relationship between multiplication and division of fractions.	2.5	
	6.NS.1	Solve real-world problems involving quotients of fractions and interpret the solutions in the context given.	2.10	
	6.RP.3c	Use a model to represent a percent and write fractions	5.1	

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		and decimals as a percent.	5.3		
#	CCSS	Unit 3: Ratios	Recommended Pacing: (Instructional Days):	Go Math Chapters Covered:	Completed
		Student Learning Objective:	Go Math Lessons		
	6.RP.1	Explain the relationship of two quantities or measures of a given ratio and use ratio language to describe the relationship between the two quantities. For example, “The ratio of wings to beaks in the birdhouse at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”			
	6.RP.2	Use rate language in the context of a ratio relationship to describe a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$. For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”			
	6.RP.3a	Use ratio and rate reasoning to solve real world and mathematical problems which include making tables of equivalent ratios, solving unit rate problems, finding percent of a quantity as a rate per 100.			
	6.RP.3d	Use ratio and rate reasoning to convert measurement units (manipulate and transform units appropriately when multiplying or dividing quantities).			
	6.RP.3b	Use unit rate to solve problems			

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#	CCSS	Unit 4: Rational Numbers Student Learning Objective:	Recommended Pacing: (Instructional Days):	Go Math Chapters Covered:	Completed
			Go Math Lessons		
	6.NS.6a 6.NS.7c	Locate positive and negative rational numbers on the number line and explain the meaning of absolute value of a rational number as indicating locations on opposite sides of (including distance from) zero on the number line.			
	6.NS.7a	Write and compare rational numbers using inequality signs.			
	6.NS.6b 6.NS.6c	Plot ordered pairs in all four quadrants on the coordinate plane and describe their reflections.			
	6.NS.7c	Interpret and explain absolute value as magnitude for a positive or negative quantity in a real-world situation.			
	6.NS.8	Solve real world problems mathematically by graphing points in all four quadrants of the coordinate plane. Use the absolute value of the differences of their coordinates to find distances between points with the same first coordinate or same second coordinate.			
	6.G.3	Draw polygons in the coordinate plane given the coordinates of the vertices and use the coordinates to solve real world distance, perimeter, and area problems.			
	6.EE.5	Solve an equation or inequality to answer the question: which values from a specified set, if any, make the equation or inequality true? and check the solution			

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		using substitution to determine whether a given number in a specified set makes an equation or inequality true. (including formulas $V=lwh$ and $V=bh$) .			
	6.NS.5	Identify numbers with an equal distance from zero as opposites. Use positive and negative numbers to represent quantities in real-world context, explaining the meaning of zero in each situation			
#	CCSS	Unit 5: Expressions, Equations, Inequalities	Recommended Pacing: (Instructional Days):	Go Math Chapters Covered:	Completed
		Student Learning Objective:	Go Math Lessons		
	6.EE.2	Use mathematical language to identify parts of an expression.			
	6.EE.4	Identify when two expressions are equivalent; for example, are the two expressions equal? $81 + 18$ and $9(9 + 2)$.			
	6.EE.6	Use variables to represent numbers and write expressions when solving real world or mathematical problems.			
	6.EE.5	Solve an equation or inequality to answer the question: which values from a specified set, if any, make the equation or inequality true? and check the solution using substitution to determine whether a given number in a specified set makes an equation or inequality true. (including formulas $V=lwh$ and $V=bh$) .			

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	6.EE.7	Write and solve one step equations that represent real world or mathematical problems.		
	6.EE.8	Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real world or mathematical problem and represent them on a number line diagram.		
	6.EE.9	Use variables to represent two quantities that change in relationship to one another in a real world problem and write an equation to express one quantity, thought of as the dependent variable, in terms of another quantity, thought of as the independent variable.		
	6.EE.9	Analyze the relationship between the dependent and independent variables in an equation using graphs and tables. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.		
#	CCSS	Unit 6: Area, Surface Area, Volume	Recommended Pacing: (Instructional Days):	Go Math Chapters Covered:
		Student Learning Objective:	Go Math Lessons	
	6.G.1	Find the area of right triangles, other triangles, special quadrilaterals and polygons by composing into rectangles or decomposing into triangles and other shapes to solve real world or mathematical problems.		
	6.G.4	Represent three dimensional figures using nets made of rectangles and triangles, and use the nets to find the		

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		surface area of the figures in the context of solving real world and mathematical problems.			
	6.G.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes. Show that the volume is the same as it would be if found by multiplying the edge lengths.			
	6.EE.1	Write and evaluate numerical expressions involving whole number exponents.			
	6.EE.2	Read, write, and evaluate expressions in which letters stand for numbers (Including formulas that arise from real-world contexts).			