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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	<b>Resources/Activities</b>	Terminology
2.1.5.B.1	M05.A-T.1	Apply place-value concepts to show an	Demonstrate that in a multi-digit number, a digit	Students will be able to read, write,		period
		understanding of operations and	in one place represents 1/10 of what it represents	and represent numbers through	GoMath! 2015	
		rounding as they pertain to whole	in the place to its left.	hundred millions.		Distributive Propery
		numbers.	Ex. Recognize that in the number 770, the 7 in the			
			tens place is 1/10 the 7 in the hundreds place.	Students will be able to describe	Harcourt Ch 6, Lesson5	Associative Property
				relationships between two	Harcourt Ch 6, Lesson 6	
			Explain patterns in the number of zeros of the	place-value positions.		Commutative Property
			product when multiplying a number by powers of			
			10 and explain patterns in the placement of the	Students will be able to use an		Commutative Property
			decimal point when a decimal is multiplied or	exponent to show powers of 10.		
			divided by a power of 10; use whole number			Identity Property
			exponents to denote powers of 10.	Students will be able to compute		
			Ex. $4 \times 10^{2} = 400$	multiplication problems using		exponent
			Ex. $0.05 \div 10^{3 = 0.00005}$	various methods involving whole		
				numbers.		base
2.1.5.B.2	M05.A-T.2	Extend an understanding of operations	Multiply whole-digit numbers (not to exceed			
		with whole numbers to perform	three-digit by three-digit).	Students will be able to know in what		inverse operations
		operations including decimals.		order operations need to be evaluated		
				to find a solution to a problem.		numerical expression
2.2.5.A.1	M05.B-0.1	Interpret and evaluate numerical	Use multiple grouping symbols (parenthesis,			
		expressions using order or operations.	brackets, or braces) in numerical expressions and	Make sense of and persevere in		order of operations
			evaluate expressions containing these symbols.	solving complex and novel		
				mathematical problems.		evaulate
			Write simple expressions that model calculations			
			with numbers and interpret numerical expressions	Students will be able to communicate		estimate
			without evaluating them.	and apply appropriate mathematical		
			Ex. Express that calculation "add 8 and 7, then	vocabulary in daily calculations and		round
			multiply 2" as 2 x (8 + 7).	problem solving.		
			Ex. Recognize that 3 x (18,932 + 921) is three times			factor
			as large as 18,932 + 921 without having to	Students will be able to recite from		
			calculate the indicated sum or product.	memory and with fluency, basic		product
			sum or product.	multiplication facts.		

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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	<b>Resources/Activities</b>	Terminology
2.1.5.B.2	M05.A-T.2	Extend an understanding of operations with whole numbers to perform	Find whole-number quotients of whole numbers with up to 4-digit dividends and 2-digit divisors.	Students will be able to divide by 2-digit divisors by using partial	GoMath! 2015	pattern
		operations including decimals. numbers.	Add, subtract, multiply, divide decimals to hundredths (no divisors with decimals).	products, base ten blocks, and compatible numbers involving whole numbers and decimals.		divisor quotient
			Read and write decimal to thousandths using	Students will be able to read, write,		remainder
			base-ten numerals, word form, and expanded form. Ex. 347.392 = 300 + 40 + 7 + .3 + .09 + .002 =	compare, and round decimals to the thousandths.		compatible numbers
			<u>3</u> x 100 + 4 x 10 + 7 x 1 + 3 x (0.1) + 9 x (0.01) + 2 x (0.001)		CC 1 Common Assessment	·
					Checkpoint #1	
				Students will be able to add whole numbers and decimals.		decimal
			Compare two decimals to thousandths based on meanings of the digits in each place using	Students will be able to compute		decimal point
			>, =, and < symbols.	multiplication problems using various methods involving whole		tenths
			Round decimals to any place (limit rounding to ones, tenths, hundredths, or thousandths place).	numbers and decimals.		hundredths
2.2.5.A.1	M05.B-0.1	Interpret and evaluate numerical	Use multiple grouping symbols	Students will be able to know in what		thousandths
		expressions using order or operations.	(parentheses, brackets, or braces) in numerical expressions and evaluate	order operations need to be evaluated to find a solution to a problem.		sequence
			expressions containing these symbols.			term
						benchmark

	Assessment		PA Core Critical Concepts 1			page 3
Standard	Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	Resources/Activities	Terminology
			Write simple expressions that model	Students will be able to make sense of		
			calculations with numbers and interpret	and persevere in solving complex and	GoMath! 2015	
			numerical expressions without evaluating	novel mathematical problems.		
			them.			
			Ex. Express that calculation "add 8 and 7,	Students will be able to communicate		
			then multiply 2" as 2 x (8 + 7).	and apply appropriate mathematical		
			Ex. Recognize that 3 x (18,932 + 921) is	vocabulary in daily calculations and		
			three times as large as 18,932 + 921	problem solving.		
			without having to calculate the indicated			
			sum or product.	Students will be able to recite from		
				memory and with fluency, basic		
			Identify apparent relationships between	multiplication facts.		
			corresponding terms of two patterns with the same			
			starting numbers that follow different rules.			
			Ex. Given two patterns in which the first pattern			
			follows the rule "add 8" and the second pattern			
			follows the rule "add 2," observe that the terms in			
			in the first pattern are 4 times the size of the terms			
			in the second pattern.			
				Recommended Time Frai	ne = 80 days	

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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	<b>Resources/Activities</b>	Terminology
2.1.5.C.1	M05.A-F.1	Use the understanding of equivalency to add/subtract fractions.	Add/subtract fractions (including mixed numbers) with unlike denominators. (May include multiple methods and representations.) <u>Ex</u> . 2/3 + 5/4 = 8/12 + 15/12 = 23/12	Students will be able to use a common denominator to add and subtract fractions and mixed numbers.	GoMath! 2015	numerator denominator
2.1.5.C.2	M05.A-F.2	Apply and extend previous understandings of multiplication/division to multiply and divide fractions.	Solve word-problems involving division of whole numbers leading to answers in the form of fractions (including mixed numbers).			fraction simplest form least common denominator
			Multiply a fraction by a fraction (including mixed number).	Students will be able to find the product of two fractions including mixed numbers.		equivalent fractions
			Demonstrate an understanding of multiplication as scaling (resizing). <u>Ex</u> . Compare the size of a product to the size of the			renaming mixed number
			other factor without performing the indicated multiplication. <u>Ex</u> . Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication of whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number.		CC 2 Common Assessment Checkpoint # 1	
			Divide unit fractions by whole numbers and whole numbers by unit fractions.	Students will be able to divide fractions by solving a related multiplication sentence. Recommended Time Fra	me = 50 days	

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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	Resources/Activities	Terminology
2.4.5.A.4	M05.D-M.2	Solve problems involving computation	Solve problems involving computation of fractions	Students will be able to use a line		data
		of fractions using information provided	by using information presented in line plots.	plot to find an average with data	GoMath! 2015	
		in a line plot.		given in fractions.		line plot
2.3.5.A.1	M05.C-G.1	Graph points in the first quadrant on	Identify parts of the coordinate plane (x-axis,	Students will be able to display,		ordered pair
		the coordinate plane and interpret	y-axis, and the origin) and the ordered pair	identify, and plot points on a		
		these points when solving real-world	(x-coordinate & y-coordinate). Limit the coordinate	coordinate grid.		origin
		and mathematical problems.	place to quadrant 1.			
						x-axis
			Represent real-world and mathematical problems			
			by plotting points in quadrant 1 of the coordinate			x-coordinate
			plane and interpret coordinate values of points in			
			the context of the situation.			y-axis
.2.5.A.4	M05.B-0.2	Analyze patterns and relationships	Generate two numerical patterns using	Students will be able to identify a		y-coordinate
		using two rules.	two given rules.	relationship between two numerical		
			Ex. Given the rule "add 3" and the starting number	patterns and use strategies to solve	Harcourt Ch. 7 Lesson 5	interval
			0 and given the rule "add 6" and the starting	a problem with patterns.	Harcourt Ch. 8 Lesson 1	
			number 0, generate terms in the resulting		Harcourt Ch. 8 Lesson 2	line graph
			sequences.		Harcourt Ch. 8 Lesson 3	
					Harcourt Ch. 8 Lesson 4	scale
			Identify apparent relationships between		Harcourt Ch. 8 Lesson 5	
			corresponding terms of two patterns		Harcourt Ch. 8 Lesson 6	quadrant
			with the same starting numbers that			
			follow different rules.		CC 3 Common Assessment	pictograph
			Ex. Given two patterns in which the first		Checkpoint # 1	
			pattern follows the rule "add 8" and the			bar graph
			second pattern follows the rule "add 2,"			
			observe that the terms in the first pattern			circle graph
			are 4 times the size of the terms in			
			the second pattern.			

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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	<b>Resources/Activities</b>	Terminology
2.4.5.A.2	M05.D-M.2	Represent and interpret data using appropriate scale.	Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs, and use a title, appropriate scale, and labels. A grid will be provided to display data on bar	Students will be able to read, interpret, analyze data in graphs and histograms while choosing appropriate scales and intervals.	GoMath! 2015	rule pattern
			graphs or line graphs.			double bar graph
2.4.5.A.1		Solve problems using conversions within a given measurement system.	Convert between different-sized measurement units within a given measurement system.	Students will be able to solve multistep problems that include		histogram
			A table of equivalencies will be provided. Ex. Convert 5 cm to meters.	measurement conversions.		capacity
				Make sense of and persevere in solving complex and novel		decameter
				mathematical problems.		decagon
						regular polygon
						congruent
						trapezoid
						equilateral triangle
2.3.5.A.2	M05.C-G.2	Classify two-dimensional figures into categories based on an understanding	Classify two-dimensional figures in a hierarchy based on properties.	Students will be able to identify, describe, and classify polygons		isoceles triangle
		of their properties.	Ex. All polygons have at least 3 sides, and pentagons are polygons, so all pentagons have	by their features.		scalene triangle
			at least 3 sides. Ex. A rectangle is a parallelogram, which is a			acute angle
			quadrilateral, which is a polygon; so a rectangle can be classified as a parallelogram,			obtuse angle
			quadrilateral, and polygon.			right angle

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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	Resources/Activities	Terminology
						rhombus
	Standa	rd 2 4.4.A.1, eligible content, student pe	rformance objectives, and resources/activities can be	taught during either math and/or science	e class.	
2.4.4.A.1	M04.D-M.1	Solve problems involving measurement	Apply the area and perimeter formulas for	Students will be able to identify how	Harcourt Ch. 26 Lesson 1	prism
		and conversions from a larger unit to a	rectangles in real-world and mathematical	perimeter and area relate.	Harcourt Ch. 26 Lesson 3	
		smaller unit.	problems (may include finding a missing side		Harcourt Ch. 26 Lesson 4	pyramid
			length); whole numbers only.		Harcourt Ch. 27 Lesson 4	
			Formulas will be provided.		Harcourt Ch. 27 Lesson 5	polyhedron
.4.5.A.5	M05.D-M.3	Apply concepts of volume to solve	Apply to formula V = L x W x H and V = B x H	Students will be able to use a formula	GoMath! 2015	polygon
		problems and relate volume to	for rectangular prisms with whole-number edge	find the volume of a rectangular		
		multiplication and division.	lengths in the context of solving real-world and mathematical problems.	prism.		triangle
			Formulas will be provided.	Make sense of and persevere in		quadrilateral
				solving complex and novel		quadriatera
			Find volumes of solid figures composed of two	mathematical problems.		pentagon
			non-overlapping right triangular prisms.			P
						hexagon
2.1.6.D.1	M06.A-R.1	Understand ratio concepts and use	Construct tables of equivalent ratios relating	Students will be able to identify	Go Math! Practice Bk (2012)	
		ration reasoning to solve problems.	quantities with whole-number measurements, find	fractions and decimals on a number	Getting Ready for Grade 6	heptagon
		<b>.</b> .	missing values in the tables, and/or plot the pairs	line.	(These lessons are in the	
		Compare fractions to decimals.	of values on the coordinate plane. Use tables to		teacher planning guide.)	octagon
			compare ratios.		Lesson 1	
		Order fractions and decimals.			Lesson 2	nonagon
			Find a percent of a quantity as a rate per 100.		Lesson 3	
		Model percents.	Ex. 30% of a quantity means 30/100 x	Students will be able to model and	Lesson 4	perimeter
			the quantity); solve problems involving the whole,	write decimals as percents.	Lesson 5	
		Relate decimals and percents.	given a part and a percentage.			area
		Write fractions, decimals, and				percent
		percents.				

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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	Resources/Activities	Terminology
2.1.6.E.1	M06.A-N.1	Apply and extend previous understandings of multiplication and division to divide fractions by	Interpret and compute quotients of fractions (including mixed numbers), and solve word problems involving division of fractions by	Students will be able to divide fractions by whole numbers.	Lesson 7	
		fractions.	fractions. <u>Ex</u> . Given a story context for (2/3) $\div$ (3/4), explain that (2/3) $\div$ (3/4) = (8/9) because 3/4 of 8/9 is 2/3. (In general, (a/b) $\div$ (c/d) = (a/b) x (d/c) = ad/bc).	Make sense of and persevere in solving complex and novel mathematical problems.		
			Ex. How wide is a rectangular strip of land with length 3/4 mi. & area 1/2 square mi? Ex. How many 2 1/4 ft. pieces can be cut from a 15 1/2 ft. board?	Students will be able to communicate and apply appropriate mathematical vocabulary in daily calculations and problem solving.		
				Students will be able to recite from memory and with fluency, basic multiplication facts.		
2.1.6.D.1	M06.A-R.1	Understand ratio concepts and use ratio reasoning to solve problems.	Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Students will be able to write ratios in various ways and write equivalent ratios.	Lesson 8 Lesson 9	ratios equivalent ratios
			Find the unit rate a/b associated with a ratio a:b ratio a:b (with b not equal to 0) and use rate language in the context of a ratio relationship. <u>Ex</u> . We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.	Students will be able to solve problems involving distance, rate, and time.	Lesson 10	rate unit rate
				Students will be able to recite from memory and with fluency, basic multiplication facts.		

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Standard	Assessment Anchor	Learning Goals / Concents	Eligible Content	Student Performance Objectives	Resources/Activities	Terminology
			Solve unit rate problems including those involving unit pricing and constant speed. <u>Ex</u> . If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	Make sense of and persevere in solving complex and novel mathematical problems.	Lesson 11	
2.1.6.E.4		Apply and extend previous understandings of numbers to the system of rational numbers.	Represent quantities in real-world contexts using positive and negative numbers, explaining the meaning of 0 in each situation (e.g. temperature above or below 0, elevation above or below sea level, credits/debits, positive or negative electric charge.) Determine the opposite of a number and recognize that the opposite of the opposite of a number is of a number is the number itself. (e.g(-3) = 3; 0 is its own opposite.)	Students will be able to use positive and negative numbers to represent real-world quantities.	Lesson 12	integer opposite positive integer negative integer
2.2.6.B.1		Apply and extend previous understanding of arithmetic to algebraic expressions.	<ul> <li>Write algebraic expressions from verbal descriptions.</li> <li><u>Ex</u>. Express the description "five less than twice a number" as 2y - 5.</li> <li>Identify parts of an expression using mathematical terms (e.g. sum, term, product, factor, quotient, coefficient, quantity).</li> <li><u>Ex</u>. Describe the expression 2(8 + 7) as a product of two factors.</li> </ul>	Students will be able to write and evaluate expressions.	Lesson 13	expression variable evaluate

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Standard	Assessment Anchor	Learning Goals/Concepts	Eligible Content	Student Performance Objectives	Resources/Activities	Terminology
			Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems.			
			Ex. Evaluate the expression $b^2 - 5$ when $b = 4$			
2.2.6.B.2	M06.B-E.2	Understand the process of solving a one-variable equation or inequality and	Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world	Students will be able to use inequalities to solve problems.	Lesson 14	inequality
		apply it to real-world and mathematical problems.	or mathematical problem and/or represent solutions of such inequalities on number lines.			height
		•				base
2.3.6.A.1	M06.C-G.1	Apply appropriate tools to solve real-world and mathematical problems involving area, surface, and volume.	Determine the areas of triangles and special quadrilaterals (i.e. square, rectangle, parallelogram, rhombus, and trapezoid).	Students will be able to find the area of a parallelogram.	Lesson 16	parallelogram
			Formulas will be provided.			area of a parallelogran
2.4.6.B.1	M06.D-S.1	Demonstrate an understanding of	Determine quantitative measures of center	Students will be able to calculate,		median
		statistical variability by displaying, analyzing, and summarizing distributions.	(e.g. median, mean, mode) and variability (e.g. range, interquartile range, mean absolute deviation).	from a set of date, mean, median, and/or mode.	Lesson 17 Lesson 18	mode
						data
			Display numerical data in plots on a number line, including line plots, histograms, and box-and-whisker plots.	Students will be able to organize, use and analyze data in a histogram.	Lesson 19 Lesson 20	mean/average
				Make sense of and persevere in solving complex and novel		histogram
				mathematical problems.		tally
						frequency
				Recommended Time Fra	me = 50 days	
					,	