GRADE 6 (GO MATH) SYLLABUS

SEMESTER ONE

Big Ideas & Essential Questions	Lesson	Assessed NE State Standards		
Unit1A: Numbers				
Module1: Integers How can you use integers to solve real-world problems?				
How do you identify and integer and its opposite?	1.1			
How do you compare and order integers?	1.2	[SS 6.1.1b] DK1		
How do you find and use absolute value?	1.3			
Module2: Factors and Multiples How can you use greatest common factors and least common multiples to solve real-world problems?				
How can you find and use the greatest common factor of two whole numbers?	2.1			
How can you find and use the least common multiple of two numbers?	2.2			
Unit1B (Module3): Rational Numbers				
Module3: How can you use rational numbers to solve real-wo	rld problems?			
How can you classify rational numbers?	3.1			
How can you identify opposites and absolute values of rational numbers?	3.2			
How can you compare and order rational numbers?	3.3			
Unit2: Number Operations				
Module4: Operations with Fractions How can you use operations with fractions to solve real-wor	d problems?			
How can you use the GCF and LCM when adding, subtracting and multiplying fractions?	4.1			
How do you divide fractions?	4.2	[SS 6.1.2a, 6.13a]		
How do you divide mixed numbers?	4.3	DK1 & DK2		
How can you solve word problems involving more than one fraction operation?	4.4			
Module5: Operations with Decimals How can you use operations with decimals to solve real-world problems?				
How do you add and subtract decimals?	5.2			
How do you multiply decimals?	5.3	[SS 6.1.2b, 6.1.4a, 6.1.3a]		
How do you divide decimals?	5.4	DK1&DK2		
How can you solve problems involving multiplication and division of fractions and decimals?	5.5			
DCA-M#1				
Unit4: Equivalent Expressions				
Module9: Generating Equivalent Numerical Expressions How can you generate equivalent numerical expressions and use them to solve real-world problems?				
How do you use exponents to represent numbers?	9.1	[SS 6.1.1d] DK1		
How do you write the prime factorization of a number?	9.2	[SS 6.1.1e] DK1		
How do you use the order of operations to simplify expressions with exponents?	9.3	[SS 6.3.3b] DK1		
Module10: Generating Equivalent Algebraic Expres	sions			
How can you generate equivalent algebraic expressions and use them to s	olve real-world	problems?		
How can you model and write algebraic expressions?	10.1	[SS 6.3.1a, 6.3.2a] DK1&DK2		
How can you use the order of operations to evaluate algebraic expressions?	10.2	[SS 6.3.3b] DK1		
How can you identify and write equivalent algebraic expressions?	10.3			
Unit5: Equations and Inequalities				
Module11: Equations and Relationships How can you use equations and relationships to solve real-world problems?				
How do you write equations and determine whether a number is a solution of an equation?	11.1	[SS 6.3.1b, 6.3.2a] DK1 & DK2		
How do you solve equations that contain addition or subtraction?	11.2	[SS 6.3.3d, 6.3.3e, 6.3.2a, 6.3.1b]		
How do you solve equations that contain multiplication or division?	11.3	DK1 & DK2		
How can you use an equation to show a relationship between two variables?	*12.3	[SS 6.3.1a, 6.3.1b] DK1 & DK2		
How can you use inequalities to represent real-world constraints or conditions?	11.4			
DCA-M#2				
SS= State Standard DK = Depth of Knowledge assessed				

Infuse throughout:

- Check the reasonableness of solutions throughout the semester. [SS 6.1.4a] DK1 & DK2
- Select and apply the appropriate method of computation when problem solving. [SS 6.1.3b] DK1 & DK2
- Model Contextualized Problems using various Representations [SS 6.3.2a] DK1 & DK2
 Use 6th Grade NeSA-M Review problems throughout curriculum as warm-ups and spiral review.

GRADE 6 (GO MATH) SYLLABUS

SEMESTER TWO

Big Ideas and Essential Questions	Lesson	Assessed NE State Standard	
Unit6A: Relationships in Geometry			
Module13: Area and Polygons			
How can you find the area of an irregular polygon using are	ea formulas?		
How can you find the areas of parallelograms, rhombuses, and trapezoids?	13.1	[SS 6 2 5e] DK1 & DK2	
How can you find the area of a triangle?	13.2	[55 0.2.56] DKI & DK2	
How can you find the area of a polygon by breaking it into simpler shapes?	13.4		
Module15: Surface Are and Volume of Solids			
How can a model help you to solve surface are and volume	problems?		
How can you use nets to find surface area?	15.1	[SS 6.2.4a] DK1 & DK2	
How can you find the volume of a rectangular prism?	15.2	[\$\$ 6.2.5f] DK1 & DK2	
Unit6B(Module14): Coordinate Plane Geometry			
Module 14: What steps might you take to solve a polygon problem given the	e coordinates of	f its vertices?	
How do you locate and name points in the coordinate plane?	*12.1	[SS 6.2.2a] DK1	
How can you use absolute value to find the distance between two points with the	14.1		
same x- or y-coordinates?	14.0		
How can you solve problems by drawing polygons in the coordinate plane?	14.2		
Unit/: Measurement and Data	D 4		
Module16: Displaying, Analyzing, and Summarizing Data			
How can you solve real-world problems by displaying, analyzing, an	a summarizing		
How can you use measures of center to describe a data set?	10.1	[55 0.4.1C] DK1	
How can you use a box plot and measures of spread to describe a data set?	16.3	100 (4 11) DV1 0 DV2	
How can you summarize and display numeric data? (supplement stem-and-leaf plots?)	16.4	[55 6.4.16] DK1 & DK2	
How can you display data in a histogram?	16.5		
UnitP: Percent & Probability			
Modules: Percents How can you use percents to solve real world proble	me?		
How can you write a ratio as a percent?	× 1		
How can you write equivalent percents fractions and decimals?	8.2	[\$\$ 6 1 1a]	
Gr7Module12&13: Experimental and Theoretical Prol	o.2	[55 0.1.14]	
How can you use probability to solve real-world prob	lems?		
How can you describe the likelihood of an event?	12.1		
How do you find the experimental probability of a simple event?	12.1	[SS 6 4 3a 6 4 3c] DK1	
How can you find the theoretical probability of a simple event?	13.1	[SS 6 4 3b] DK1 & DK2	
DCA-M#3	15.1	[55 0.4.56] DKI & DK2	
At this point in curriculum 6 th Grade Assessed State Standards have been covered			
Unit3: Proportionality			
Module6: Representing Ratios and Rates			
How can you use ratios and rates to solve real-world pr	oblems?		
How do you use ratios to compare two quantities?	6.1		
How do you use rates to compare quantities?	6.2		
How can you use ratios and rates to make comparisons and predictions?	6.3		
Module7: Applying Ratios and Rates How can you use ratios and rates to solve real world problems?			
How can you represent real-world problems involving ratios and rates with tables and graphs?	7.1		
How can you solve problems with proportions?	7.2		
How can you use percents to solve problems?	*8.3		
How do you convert units within a measurement system?	7.3		
How can you use ratios and proportions to convert measurements?	7.4		
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Infuse throughout:

• Select and apply the appropriate method of computation when problem solving. [SS 6.1.3b] DK1 & DK2

Check the reasonableness of solutions throughout the semester. [SS 6.1.4a] DK1 & DK2
Model Contextualized Problems using various Representations [SS 6.3.2a] DK1 & DK2
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