

PowerTeaching Math 3rd Edition:

Grade 6

Abbreviated Scope and Sequence

The PowerTeaching Math 3rd Edition: Grade 6 Scope and Sequence is a guide for the content covered in each lesson of the PowerTeaching grade 6 curriculum. Additionally, the scope and sequence visually demonstrates the structure of PowerTeaching, showing how the lessons are divided into units and cycles based on math content and providing a picture of when media, tools, and routines are introduced and used within each lesson cycle. The scope and sequence also lists the Common Core State Standards for Mathematical Practice and Content that apply to each lesson.

The scope and sequence is also a guide to the order in which the PowerTeaching lessons are intended to be taught. This order is provided so concepts can be introduced and then later reviewed as a part of new skills. Similarly, problem-solving strategies are first introduced then applied to later word problems and real-world math situations.

Getting Started

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 1 – Getting Started	Cycle 1 – Getting Started	1 – Welcome to PowerTeaching Math	Learn the basics of cooperative learning and teamwork, learn about Vocabulary Vault, and then take a pretest.	n/a
		2 – Working Together	Learn the student routines for Team Mastery with role cards and Lightning Round.	CC MP1
		3 – Think Like a Mathematician: Making Sense 1	Learn the opening routines, the Think Like a Mathematician practices and Random Reporter rubric criteria, and the team cooperation goals.	CC MP1
		4 – Think Like a Mathematician: Making Sense 2	Ignore extraneous data to make sense of problems and solve them.	CC MP1
		5 – Think Like a Mathematician: Making Sense 3	Make sense of complex problems by solving simpler ones.	CC MP1
		6 – Assessment Day, Part 1	Demonstrate mastery of unit content, and learn about assessment routines and prep points.	CC MP1
		7 – Assessment Day, Part 2	Complete prep points, open the Vocabulary Vault, complete the team-scoring student routine, and celebrate.	CC MP1

The Number System

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 2 – Computation Skills	Cycle 1 – Computation with Whole Numbers	1 – Mental Math	Use mental math strategies for multiplication and division. (CC 6.NS.B.2 and 4; TEKS 6.b.3.E; VA SOL 4.4a)	CC MP 2, 3, and 5
		2 – Estimation	Estimate products and quotients; determine if an estimate or an exact answer is more appropriate. (CC 6.NS.B.2; TEKS 6.b.3.B and E; VA SOL 4.4a)	CC MP 3 and 5
		3 – Whole Number Division 1	Use the standard algorithm to divide multidigit whole numbers. (CC 6.NS.B.2; TEKS 6.b.3.E; VA SOL 4.4c, 5.4)	CC MP 1, 3, 4, and 5
		4 – Whole Number Division 2	Use the standard algorithm to divide multidigit numbers and show remainders in appropriate forms. (CC 6.NS.B.2; TEKS 6.b.3.E; VA SOL 4.4c, 5.4)	CC MP 1, 3, 4
	Computation with Whole Numbers Assessment			
	Cycle 2 – Computation with Decimals	1– Estimating with Decimals	Estimate the value of a decimal. Estimate sums, differences, products, and quotients of decimals beyond the thousandths place. (CC 6.NS.B.3; TEKS 6.b.3.E; VA SOL 5.5a)	CC MP 3, 5, and 7
		2 – Adding and Subtracting Decimals	Use the standard algorithm to find the sum and difference of multidigit decimal numbers. (CC 6.NS.B.3; TEKS 5.b.3.K; VA SOL 4.5c, 6.7)	CC MP 1, 2, 3, 4, and 6
		3 – Multiplying Decimals	Use the standard algorithm to find the product of multidigit decimal numbers. (CC 6.NS.B.3; TEKS 6.b.3.E; VA SOL 5.5a, 6.7)	CC MP 1, 3, 5, and 6
		4 – Dividing Decimals	Use the standard algorithm to find the quotient of multidigit decimal numbers. (CC 6.NS.B.3; TEKS 6.b.3.E; VA SOL 5.5a, 6.7)	CC MP 1, 3, 4, 5, and 6
		5 – Problem Solving with Decimals	Use decimal computation to solve complex, real-world math problems. (CC 6.NS.B.3; TEKS 6.b.3.E; VA SOL 6.7)	CC MP 1, 2, and 4
	Computation Skills Assessment			
	Cycle 3 – Performance Task	Computation Skills Performance Task (Starting a Food Truck Business)	Three-day cycle in which students use computation skills with whole and decimal numbers to complete a complex task. (CC 6.NS.B.2–4; TEKS 6.b.1.A–B, 6.b.3.E; VA SOL 5.4, 6.7)	CC MP 1, 2, 3, and 4

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 3 – Fractions	Cycle 1 – GCF and LCM	1 – Greatest Common Factor	Find the greatest common factor of two whole numbers. (CC 6.NS.B.4; TEKS 6.b.3; VA SOL 4.5a)	CC MP 3, 4, and 5
		2 – Least Common Multiple	Find the least common multiple of two whole numbers. (CC 6.NS.B.4; TEKS 6.b.3; VA SOL 4.5a)	CC MP 1, 3, 4, and 5
		3 – Problem Solving with GCF and LCM	Use GCF and LCM to solve complex, real-world math problems. (CC 6.NS.B.4; TEKS 6.b.3; VA SOL 5.4)	CC MP 1, 3, 4, and 6
	GCF and LCM Assessment			
	Cycle 2 – Fraction Concepts	1 – Estimating the Value of Fractions	Estimate the value of complex fractions in relation to 0, $\frac{1}{2}$, and 1. (CC 6.NS.A.1; TEKS 6.b.2.C and D; VA SOL 6.2d)	CC MP 5
		2 – Multiplying Fractions	Multiply fractions with meaning. (CC 6.NS.A.1; TEKS 6.b.3.B and E; VA SOL 6.4, 6.6)	CC MP 3, 5, and 6
		3 – Multiplying Mixed Numbers	Multiply fractions and mixed numbers. (CC 6.NS.A.1; TEKS 6.b.3.B and E; VA SOL 6.4, 6.6)	CC MP 1, 3, and 6
	Fraction Concepts Assessment			

	Cycle 3 – Dividing Fractions	1 – Dividing Whole Numbers by Fractions	Divide whole numbers by fractions and mixed numbers. (CC. 6.NS.A.1; TEKS 6.b.3.A, B, and E; VA SOL 6.6)	CC MP 1, 2, 3, 4, and 7
		2- Dividing Fractions by Fractions	Divide fractions by other fractions. (CC. 6.NS.A.1; TEKS 6.b.3.A, B, and E; VA SOL 6.6)	CC MP 1, 2, 3, 4, and 7
		3 – Problem Solving with Multiplying and Dividing Fractions	Multiply and divide fractions, whole numbers, and mixed numbers to solve complex, real-world word problems. (CC. 6.NS.A.1; TEKS 6.b.3.A, B, and E; VA SOL 6.6)	CC MP 1, 2, 3, and 4
		4 – Think Like a Mathematician: Build a Math Model 1	Build a math model to solve problems. (CC MP.7; TEKS 6.b.1.E)	CC MP 4
		Fractions Assessment		

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 4 – Rational Numbers	Cycle 1 – Introduction to Integers	1 – Exploring Integers	Use integers to represent real-world concepts and quantities. (CC 6.NS.C.5; TEKS 6.b.2.B; VA SOL 6.3CF)	CC MP 3 and 6
		2 – Graphing Ordered Pairs in All Quadrants	Locate and plot points in all quadrants of a coordinate plane. (CC 6.NS.C.6a-c; TEKS 6.b.11; VA SOL 6.11)	CC MP 3, 4, and 6
		3 – Exploring Graphing	Use the coordinate plane and the properties of polygons to solve problems. (CC 6.NS.C.8; TEKS 6.b.11; VA SOL 6.11)	CC MP 1, 2, 4, and 6
		Introduction to Integers Assessment		
	Cycle 2 – Problem Solving with Rational Numbers	1 – Comparing and Ordering Integers	Use a number line and number sense to compare and order integers in real-world and mathematical context. (CC 6.NS.C.7; TEKS 6.b.2.C and D; VA SOL 6.3b)	CC MP 3, 5 and 6
		2- Absolute Value	Find the absolute value of given rational numbers, and order absolute values. (CC 6.NS.C.7; TEKS 6.b.2.B; VA SOL 6.3c)	CC MP 3, 5, and 6
		3 – Problem Solving with Coordinates	Solve real-word problems that involve plotting points on and calculating distance on coordinate planes. (CC 6.NS.C.8 and 6.G.A.3; TEKS 6.b.11; VA SOL 6.11, 6.11CF)	CC MP 1, 2, 4, and 6
		4 – Think Like a Mathematician: Build a Math Model 2	Build a math model to solve problems. (CC MP.4; TEKS 6.b.1.E)	CC MP 4
		Rational Numbers Assessment		

Ratios and Proportional Relationships

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 5 – Introduction to Ratios and Rates	Cycle 1 – Introduction to Ratios and Rates	1 – What are ratios?	Write ratios in three ways, and use ratio language. (CC 6.RP.A.1; TEKS 6.b.4.E; VA SOL 6.1CF, 6.2a)	CC MP 3, 2, and 4
		2 – Ratios and Tables	Use tables to find equivalent ratios. (CC 6.RP.A.3a; TEKS 6.b.5.A; VA SOL 6.1CF, 7.4, 7.12)	CC MP 1, 3, 4, 5, and 7
		3 – Rate and Unit Rate	Identify and write rates, and find unit rates. (CC 6.RP.A.2; TEKS 6.b.4.D; VA SOL 6.1, 6.1CF, 7.4)	CC MP 3, 4, and 6
		4 – Comparing Rates	Compare rates in the context of real-world problems. (CC 6.RP.A.3b; TEKS 6.b.4.B; VA SOL 6.1CF, 7.4)	CC MP 1, 2, 3, and 4
		5 – Think Like a Mathematician: Find the Patterns and Structure 1	Find a pattern to solve problems. (CC MP.7; TEKS 6.b.1.F)	CC MP 3 and 7
		Introduction to Ratios and Rates Assessment		

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 6 – Ratio and Percent Application	Cycle 1 – Problem Solving with Ratio and Rate	1 – Converting Measurements	Determine conversion rates, and use given rates to convert measures. (CC 6.RP.A.3d; TEKS 6.b.4.C and H; VA SOL 6.1–2)	CC MP 3, 4, 5, and 6
		2 – Problem Solving with Unit Rates	Solve complex unit-rate and unit-price word problems. (CC 6.RP.A.3b; TEKS 6.b.4.B and D; VA SOL 7.4, 7.12)	CC MP 3, 4, 6, and 8
		3 – Graphing Equivalent Ratios	Make tables of equivalent ratios and graph the ratios as ordered pairs. (CC 6.RP.A.3a; TEKS 6.b.5.A; VA SOL 6.1, 7.4, 7.12)	CC MP 3, 4, 5, and 6
		4 – Problem Solving with Ratios and Tape Diagrams	Use tape diagrams to answer questions about rates and ratios. (CC 6.RP.A.3a; TEKS 6.b.4.B–E; VA SOL 6.1, 7.4, 7.12)	CC MP 1, 2, 3, and 4
		5 – Rate and Ratio Problem Solving	Use rate and ratio reasoning to solve complex, real-world problems. (CC 6.RP.A.1–3; TEKS 6.b.4.B–E; VA SOL 6.1–2, 7.4)	CC MP 1, 2, and 4
		Problem Solving with Ratio and Rate Assessment		
	Cycle 2 – Percents	1 – Understanding Percent	Write a percent to represent a simple situation and convert between fractions, decimals, and percents. (CC 6.RP.A.3c; TEKS 6.b.4.E–G; VA SOL 6.2b–c)	CC MP 2, 3, and 6
		2 – Comparing and Ordering Percents, Fractions, and Decimals	Compare and order percents, fractions, and decimals in mathematical and real-world contexts. (CC 6.RP.A.3c; TEKS 6.b.4.G and 5.C; VA SOL 6.2c and d)	CC MP 3 and 6
		3 – Solving Percent Problems	Solve one-step word problems involving percents, such as finding the percent of a number. (CC 6.RP.A.3c; TEKS 6.b.5.B–C; VA SOL 6.2c, 7.4)	CC MP 1, 2, 3, and 4
		4 – Problem Solving with Percents	Solve complex, real-world problems involving percents, decimals, and fractions. (CC 6.RP.A.3c; TEKS 6.b.5.B; VA SOL 7.4)	CC MP 1, 2, 3, 4, and 6
		5 – Think Like a Mathematician: Making Sense 4	Use the Guess and Check strategy to make sense of problems and solve them. (CC MP.1; TEKS 6.b.1.B, F)	CC MP 1 and 3
		Ratio and Percent Applications Assessment		
	Cycle 3 – Performance Task	Ratio and Percent Applications Performance Task (Preparing for a Dinner Fundraiser)	Three-day cycle in which students use ratios and proportional thinking to complete a complex task. (6.RP.A.1–3; TEKS 6.b.4–5; VA SOL 6.1–2, 7.4)	CC MP 1, 2, 3, 4, 5, and 6

Expressions and Equations

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 7 – Writing and Evaluating Expressions	Cycle 1 – Numeric Expressions	1 – Understanding Exponents	Use real-world examples, such as area and arrays, to simplify exponents. (CC 6.EE.A.1; TEKS 6.b.7.A; VA SOL 6.8)	CC MP 3, 4, 6, 7, and 8
		2 – Order of Operations	Use the full order of operations to simplify and evaluate numeric expressions. (CC 6.EE.A.1; TEKS 6.b.7.A; VA SOL 6.8)	CC MP 3, 5, 6, and 7
		3 – Writing and Evaluating Numeric Expressions	Write numeric expressions to solve complex, real-world math situations. (CC 6.EE.A.1; TEKS 6.b.7.A; VA SOL 6.8)	CC MP 1, 2, 3, 4, and 5
		Numeric Expressions Assessment		
	Cycle 2 – Writing Algebraic Expressions	1 – Introduction to Variables	Define variables, and then identify and name variables in math stories. (CC 6.EE.A.2 and B.6; TEKS 5.b.4.B; VA SOL 5.18)	CC MP 2, 3, and 4
		2 – Algebraic Expressions and Vocabulary	Understand and identify the key parts of algebraic expressions (variable, constant, term, etc). (CC 6.EE.A.2b; VA SOL 6.18CF)	CC MP 3, 5, and 6
		3 – Writing Expressions 1	Write one-step algebraic expressions to represent math phrases and vice versa. (CC.6.EE.A.2a; TEKS 6.b.7; VA SOL 7.13a)	CC MP 2, 3, and 6
		4 – Writing Expressions 2	Write multistep algebraic expressions to represent math phrases and vice versa. (CC 6.EE.A.2a; TEKS 6.b.7; VA SOL 7.13a)	CC MP 2 and 3
		Writing Algebraic Expressions Assessment		
	Cycle 3 – Evaluating Algebraic Expressions	1 – Evaluating Expressions 1	Evaluate single-step and multistep expressions for specific values. (CC 6.EE.A.2; TEKS 6.b.7; VA SOL 7.13b)	CC MP 1, 2, 3, 5, and 6
		2 – Evaluating Expressions 2	Use geometric formulas to explore and evaluate algebraic expressions with exponents. (CC 6.EE.A.2; TEKS 6.b.8; VA SOL 7.13)	CC MP 2, 3, 6, and 7
		3 – Expressions and Patterns	Use a table of values to determine how changing the value of the variable affects the value of the expression. (CC 6.EE.A.2; TEKS 6.b.6; VA SOL 5.17CF)	CC MP 3, 4, and 7
		4 – Writing and Evaluating Algebraic Expressions	Write and evaluate algebraic expressions for real-world math situations. (CC 6.EE.A.2; TEKS 6.b.7; VA SOL 7.12-13)	CC MP 1, 2, 3, and 7
		5 – Think Like a Mathematician: Find the Patterns and Structure 2	Use the Work Backward strategy to solve problems. (CC MP.7)	CC MP 2 and 7
		Writing and Evaluating Expressions Assessment		

Unit 8 – Equivalent Expressions	Cycle 1 – Properties of Addition	Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
		1 – Combining Like Terms	Identify the properties of addition, and use them to rewrite expressions. (CC 6.EE.A.3; TEKS 6.b.7.D; VA SOL 6.19a)	CC MP 3, 6, and 7
		2 – Properties of Addition	Simplify algebraic expressions with one variable. (CC 6.EE.A.3; TEKS 6.b.7.A and D; VA SOL 6.19)	CC MP 2, 3, and 6
		3 – Proving Expressions Equivalent 1	Evaluate two expressions to determine if they are equivalent, and use the properties of addition to describe why. (CC 6.EE.A.4; TEKS 6.b.7.C and D; VA SOL 6.19a, 7.13, 7.16)	CC MP 3, 6, and 7
	Properties of Addition Assessment			
	Cycle 2 – Properties of Multiplication	1 – Properties of Multiplication	Identify the properties of multiplication, and use them to rewrite expressions. (CC 6.EE.A.3; TEKS 6.b.7.D; VA SOL 6.19)	CC MP 3, 6, and 7
		2 – Greatest Common Factors of Monomials	Identify the GCF of algebraic terms in an expression. (CC 6.EE.A.3; TEKS 6.b.7.D; VA SOL 6.19)	CC MP 3, 4, 6, 7, and 8
		3 – Distributive Property	Use the distributive property to rewrite expressions. (CC 6.EE.A.3; TEKS 6.b.7.D; VA SOL 6.19, 7.16)	CC MP 3, 6, and 7
		4 – Proving Expressions Equivalent 2	Evaluate two expressions to determine whether they are equivalent, and use the properties of multiplication to describe why. (CC 6.EE.A.4 TEKS 6.b.7.C–D; VA SOL 6.19, 7.16)	CC MP 3, 6, and 7
	Equivalent Expressions Assessment			

Unit 9 – Solving Equations	Cycle 1 – Introduction to Equations	Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
		1 – Defining Equations	Understand and model that equations must remain balanced by definition. (CC 6.EE.B.5; TEKS 6.b.7.B, 6.b.10.A; VA SOL 6.18, 6.18CF)	CC MP 2, and 3
		2 – Solutions to Equations	Substitute given values into the variables of equations to determine if they are possible solutions. (CC 6.EE.B.5; TEKS 6.b.10.B; VA SOL 6.18, 6.18CF)	CC MP 2, 3, and 6
		3 – Solving Equations	Use mental math and the guess-and-check strategy to solve one-step equations. (CC 6.EE.B.5; TEKS 6.b.10.B; VA SOL 6.18)	CC MP 1, 2, 3, and 6
		4 – Geometry and Equations	Use mental math, the guess-and-check strategy, and visual estimation to solve geometric equations. (CC 6.EE.B.5; TEKS 6.b.8.D; VA SOL 6.10c, 6.18)	CC MP 1, 2, 3, and 4
	Introduction to Equations Assessment			
	Cycle 2 – One-Step Equations	1 – Inverse Operations	Define and identify inverse operations, and use them to solve equations equal to 0. (CC 6.EE.B.7; TEKS 6.b.7.D; VA SOL 6.18, 6.18CF)	CC MP 3, 6, and 7
		2 – Solving Addition and Subtraction Equations	Use inverse operations to solve one-step addition and subtraction equations. (CC 6.EE.B.7; TEKS 6.b.10.A; VA SOL 6.18, 6.18CF)	CC MP 2, 3, and 7
		3 – Solving Multiplication and Division Equations	Use inverse operations to solve one-step multiplication and division equations. (CC 6.EE.B.7; TEKS 6.b.10.A; VA SOL 6.18, 6.18CF)	CC MP 2 and 3
		4 – Solving Equations to Answer Questions	Solve a given one-step equation to answer a real-world math problem. (CC 6.EE.B.7; TEKS 6.b.10.A; VA SOL 6.18, 6.18CF)	CC MP 1, 2, and 3
	One-Step Equations Assessment			

	Cycle 3 – Equations and Problem Solving	1 – Choosing the Correct Equation 1	Given a choice of addition and multiplication equations, choose the one that correctly represents the math situation. (CC 6.EE.B.7; TEKS 6.b.9.A; VA SOL 6.18, 6.18CF)	CC MP 2, 3, and 4
		2 – Choosing the Correct Equation 2	Given a choice of subtraction and division equations, choose the one that correctly represents the math situation. (CC 6.EE.B.7; TEKS 6.b.9.A; VA SOL 6.18, 6.18CF)	CC MP 2, 3, and 4
		3 – Writing and Solving Equations	Write an equation to represent a real-world problem, and then solve the equation to answer the question. (CC 6.EE.B.7; TEKS 6.b.10.A; VA SOL 5.18b, 6.18)	CC MP 1, 2, 3, and 4
		Solving Equations Assessment		

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 10 – Inequalities	Cycle 1 –Inequalities	1 – Introduction to Inequalities	Understand the differences and similarities between equations and inequalities. (CC 6.EE.B.8; TEKS 6.b.9.A; VA SOL 6.20)	CC MP 3 and 6
		2 – Graphing Inequalities	Graph simple inequalities on a number line, and answer questions about the inequalities. (CC 6.EE.B.8; TEKS 6.b.9.B; VA SOL 6.20)	CC MP 1, 3, 4, 6
		3 – Solutions in Inequalities	Use mental math, guess and check, and substitution to find solutions to inequalities. (CC 6.EE.B.8; TEKS 6.b.10.A; VA SOL 6.20)	CC MP 1, 2, 3, 4, and 7
		4 – Problem Solving with Inequalities	Write inequalities to represent real-world problems and find solutions for them. (CC 6.EE.B.8; TEKS 6.b.9.C, 10.A; VA SOL 6.20)	CC MP 1, 2, 3, 6, and 7
	Inequalities Assessment			

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 11 –Equations and Graphs	Cycle 1 – Equations and Graphs	1 – Independent and Dependent Variables	Understand the definitions for dependent and independent variables. (CC 6.EE.C.9; TEKS 6.b.6.A; VA SOL 7.12, 8.12)	CC MP 1, 6, and 7
		2 – Tables and Equations 1	Make a table of values from a linear equation, and name the independent and dependent variables. (CC 6.EE.C.9; TEKS 6.b.6.A and C; VA SOL 7.12, 8.12)	CC MP 3, 4, and 6
		3- Tables and Equations 2	Write equations and make a table of values using real-world area, perimeter, and volume problems. (CC 6.EE.C.9; TEKS 6.b.8.C–D; VA SOL 6.10c, 7.12, 8.12)	CC MP 2, 3, 4, and 8
		4 – Graphing Equations	Given a real-world situation, make a table of values, write an equation, and graph the relationship. (CC 6.EE.C.9; TEKS 6.b.6, 10.A; VA SOL 7.12, 8.12)	CC MP 1, 3, 4, and 8
	Equations and Graphs Assessment			

Geometry and Measurement

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 12 – Measurement	Cycle 1 – Measurement Conversions	1 – Converting Measurement	Use ratio reasoning and conversion factors to convert within the metric and customary systems. (CC 6.RP.A.3d; TEKS 6.b.4.H; VA SOL 6.1-2, 7.4)	CC MP 3, 2, 5, 6, 7, and 8
		2 – Measurements and Linear Relationships	Use ratio reasoning to explore the relationships between metric and customary units. (CC 6.RP.A.3d; TEKS 7.b.4.E; VA SOL 6.9, 7.4)	CC MP 2, 3, 5, 6, 7, and 8
		3 – Measurement in Problem Solving	Answer complex, real-world problems involving estimating, finding, and converting measures of length, weight, and capacity. (CC 6.RP.A.3d; TEKS 6.b.4.H, 7.b.4.E; VA SOL 6.9, 7.4)	CC MP 1, 2, 3, 5, 6, 7, and 8
	Measurement Conversions Assessment			
	Cycle 2 – Area	1 – Properties of Polygons	Identify two-dimensional shapes based upon the measures and characteristics of their sides and angles. (CC 5.G.B.3; TEKS 5.b.5; VA SOL 6.13, 6.13CF)	CC MP 3, 5, and 6
		2 – Area of Rectangles and Triangles	Review the formula for area of a rectangle and derive the formula of a triangle from a rectangle. (CC 6.G.A.1; TEKS 6.b.8.B; VA SOL 6.10c)	CC MP 3, 4, 5, 6, and 8
		3 – Area of Quadrilaterals	Find the area of special quadrilaterals by composing or decomposing them into rectangles and triangles. Extrapolate formulas for finding the area of each shape. (CC 6.G.A.1; TEKS 6.b.8.B; VA SOL 6.10c)	CC MP 4, 5, 6, and 8
		4 – Area of Complex Shapes	Find the area of complex shapes by decomposing them into triangles and quadrilaterals. (CC 6.NS.C.8 and CC 6.G.A.1; TEKS 6.b.8.B; VA SOL 6.10c)	CC MP 3, 4, and 6
		5 – Problem Solving with Area	Use the formulas for area of triangles and quadrilaterals to solve real-world problems. (CC 6.G.A.1; TEKS 6.b.8.B–C; VA SOL 6.10c)	CC MP 1, 2, 3, 5, and 6
	Measurement Assessment			

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 13– Volume and Surface Area	Cycle 1 – Volume of a Rectangular Prism	1 – Unit Fraction Cubes	Determine the number of unit fraction cubes that fit into a unit cube, and multiply to find the volume of unit fraction cubes. (CC 6.G.A.2; TEKS 5.b.6, 6.b.8.C; VA SOL 6.10d)	CC MP 3, 4, and 7
		2 – Finding Volume 1	Estimate the volume of a container/rectangular prism in fractional unit cubes, and then find the actual volume in fractional unit cubes. (CC 6.G.A.2; TEKS 5.b.6, 6.b.8.C; VA SOL 6.10d)	CC MP 3, 4, and 6
		3 – Finding Volume 2	Use the formulas for volume to estimate and find the volume of rectangular prisms with fractional side lengths. (CC 6.G.A.2; TEKS 5.b.6, 6.b.8.C and D; VA SOL 6.10d)	CC MP 3, 4, 5, and 6
		4 – Additive and Subtractive Volumes	Decompose and compose complex three-dimensional shapes to find the volume. (CC 6.G.A.2; TEKS 5.b.6, 6.b.8.C and D; VA SOL 6.10d)	CC MP 1, 2, and 3
		5 – Problem Solving with Volume	Solve complex, real-world problems related to finding volume. This will include additive and subtractive problems. (CC 6.G.A.2; TEKS 5.b.6, 6.b.8.C and D; VA SOL 6.10d)	CC MP 1, 2, and 3
	Volume of a Rectangular Prism Assessment			

	Cycle 2 – Surface Area	1 – Nets	Name a solid figure for a given net, and construct or draw a net when given a solid figure. (CC 6.G.A.4; TEKS 7.b.9.D; VA SOL 6.10d, 7.5)	CC MP 3, 4, 5, and 7
		2 – Surface Area of Prisms	Construct and use nets to find the surface area of prisms. Extrapolate the process to find the surface area without nets. (CC 6.G.A.4; TEKS 7.b.9.D; VA SOL 6.10d, 7.5)	CC MP 1, 3, 4, and 5
		3 – Surface Area of Pyramids	Construct and use nets to find the surface area of pyramids. Extrapolate the process to find the surface area without nets. (CC 6.G.A.4; TEKS 7.b.9.D; VA SOL 6.10d, 7.5)	CC MP 1, 3, 4, and 5
		4 – Problem Solving with Surface Area	Use nets or processes to find surface area to solve complex, real-world problems. (CC 6.G.A.4; TEKS 7.b.9.D; VA SOL 6.10d, 7.5)	CC MP 1, 3, 4, and 5
	Volume and Surface Area Assessment			
Cycle 3 – Performance Task	Volume and Surface Area Performance Task (Kitchen Remodel)	Three-day cycle on measurement concepts. (CC.6.G.A.1–4; TEKS 5.b.6 and 7, 6.b.8, 9.D; VA SOL 6.10, 7.5)	CC MP 1, 2, 3, 4, and 5	

Statistics and Probability

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 14 - Introduction to Statistics	Cycle 1 – Statistical Questions	1 – Statistical Questions 1	Identify statistical questions, categorical data, and numerical data. (CC 6.SP.A.1; TEKS 6.b.13.B; VA SOL 6.14CF)	CC MP 3 and 6
		2 – Statistical Questions 2	Write statistical questions tailored to collect the desired data. (CC 6.SP.A.1; TEKS 6.b.13.B; VA SOL 6.14CF)	CC MP 3 and 6
		3 – Variability	Analyze the variability of a situation, and determine if it is desirable to have great variability in that situation. (CC 6.SP.A.1; TEKS 6.b.13.B; VA SOL 6.14CF)	CC MP 1, 3, and 6
		Statistical Questions Assessment		
	Cycle 2 – Data Displays	1 – Categorical Data	Interpret categorical data on bar graphs and circle graphs. (CC 6.SP.B.4; TEKS 7.b.6.G; VA SOL 3.17b, 6.14b)	CC MP 1, 2, 3, 4, and 5
		2 – Numeric Data	Analyze numerical data on dot/line plots, stem and leaf plots, and histograms. (CC 6.SP.B.4; TEKS 6.b.13.A; VA SOL 6.14c)	CC MP 1, 3, 4, and 5
		3 – Line Plots	Create and interpret dot/line plots. (CC 6.SP.B.4; TEKS 6.b.12.A; VA SOL 3.17b)	CC MP 3, 4, 5, and 6
		4 – Histograms	Create and interpret histograms. (CC 6.SP.B.4; TEKS 6.b.12.A, 13.A; VA SOL 3.17b, 7.11a)	CC MP 3, 4, 5, and 6
		5 – Line Graphs	Create and interpret line graphs. (CC 6.SP.B.5; TEKS 6.b.12.A, 13.A; VA SOL 6.14CF)	CC MP 1, 3, 4, and 5
		6 – Data Displays	Collect data, and then create an appropriate display for the data in a computer spreadsheet. (CC 6.SP.B.5; TEKS 6.b.12.A and 13.A; VA SOL 6.14CF)	CC MP 3, 4, and 5
		Introduction to Statistics Assessment		

		Lesson	Main Math Concept(s)	Common Core Standard(s) of Mathematical Practice
Unit 15 – Describing and Using Data	Cycle 1 – Distribution, Statistics, and Data	1 – Describing the Distribution of Numerical Data	Compare the shapes of numerical data sets on similar and different data. (CC 6.SP.A.2; TEKS 6.b.12.B; VA SOL 5.16, 6.15)	CC MP 1, 2, 3, 4 and 6
		2 – Creating a Box Plot	Construct and analyze box plots. (CC 6.SP.A.2, B.4; TEKS 6.b.12.A and B; VA SOL A.10)	CC MP 1, 2, 3, and 4
		3 – Comparing Data Shown on Box Plots	Compare box plots on similar and different data. (CC 6.SP.A.2; TEKS 6.b.12.A, 7.b.12.A; VA SOL A.10)	CC MP 1, 2, 3, and 4
		Distribution, Statistics, and Data Assessment		
	Cycle 2 – Measures of Center and Variability	1 – Measures of Center 1	Calculate mean, median, and mode of a given data set. (CC 6.SP.A.3, B.5c; TEKS 6.b.12.B–C; VA SOL 6.15)	CC MP 3 and 6
		2 – Measures of Center 2	Analyze what the mean, median, and mode of a data set tell you about the data. (CC 6.SP.A.3, B.5c; TEKS 6.b.12.B–C; VA SOL 6.15)	CC MP 3, 4, and 7
		3 – Measures of Variability	Calculate interquartile range and mean absolute deviation, and analyze what these measures of variability tell you about a data set. (CC 6.SP.A.3, B.5c; TEKS 6.b.12.B–C, 8.b.11.B; VA SOL 6.15, A.9)	CC MP 1, 3, 6, and 7
		4 – Describing Data	Use the shape of the data, the measures of center, and the measures of variability to describe the data set. (CC 6.SP.A.3, B.5; TEKS 6.b.12.B–C; VA SOL 6.15)	CC MP 1, 3, 4, 5, and 7
		Describing and Using Data Assessment		
	Cycle 3 – Performance Task	Statistics Performance Task (Family Vacation)	Three-day cycle in which students will find or gather data and analyze the data they have collected with various measures and graphs. (CC 6.SP.A.1–3 and B.4–5; TEKS 6.b.12; VA SOL 6.14, 6.15)	CC MP 1, 2, 3, 4, 7, and 8