

Unit 1: Arithmetic

Lesson	Topics	Objectives
1.1	Exponents Expanded Form	-express repeated multiplication using exponential notation (e.g., $2 \times 2 \times 2 \times 2 = 2^4$); -represent whole numbers in expanded form using powers of ten (e.g., $347 = 3 \times 10^2 + 4 \times 10^1 + 7$)
1.2	Scientific Notation	
1.3	Square Roots	
1.4	Adding integers / Subtracting Integers	- solve problems involving operations with integers, using a variety of tools (e.g., two colour counters, virtual manipulatives, number lines);
1.5	Multiplying / Dividing Integers	-represent the multiplication and division of integers, using a variety of tools [e.g., if black counters represent positive amounts and red counters represent negative amounts, you can model $3 \times (-2)$ as three groups of two red counters
1.6	Order of Operations	-evaluate expressions that involve integers, including expressions that contain brackets and exponents, using order of operations

Unit 2: Fractions

Lesson	Topics	Objectives
2.1	Adding / Subtracting Fractions Common Denominators	-solve problems involving addition, subtraction, multiplication, and division with simple fractions;
2.2	Adding / Subtracting Fractions with mixed numbers	
2.3	Multiplying Fractions	
2.4	Dividing Fractions	
2.5	Multiplying / Dividing Fractions with Mixed Numbers	
2.6	Order of Operations with Fractions	

Unit 3: Algebra

Lesson	Topics	Objectives
3.1	Solving Equations by Graphing	-represent linear patterns graphically (i.e., make a table of values that shows the term number and the term, and plot the coordinates on a graph), using a variety of tools (e.g., graph paper, calculators, dynamic statistical software);
3.2	Substitution	-evaluate algebraic expressions with up to three terms, by substituting fractions, decimals, and integers for the variables
3.3	Solving Equations - Algebraic operations (+/-)	-solve and verify linear equations involving a one-variable term and having solutions that are integers, by using inspection, guess and check, and a “balance” model
3.4	Solving Equations - Algebraic operations (x , /)	

Unit 4: Angles and Triangles

Lesson	Topics	Objectives
4.1	Interior and Exterior angles of a triangle	-solve angle-relationship problems involving triangles (e.g., finding interior angles or complementary angles), intersecting lines (e.g., finding supplementary angles or opposite angles), and parallel lines and transversals (e.g., finding alternate angles or corresponding angles)
4.2	Angles and Parallel Lines	
4.3	Pythagorean Theorem	-solve problems involving right triangles geometrically, using the Pythagorean relationship;
4.4		