Grade 6 Math Unit 6

Canterbury	Public	Schools

Subject	Math
Grade Level	6
Unit Title	Expressions and Equations
pressUnit Goals	Write numerical expressions Evaluate expressions in which a letter stands for numbers Use the process of reasoning to solve an equation Equations in one variable Tape diagrams and equations Truth and equations Staying in balance New way to solve a /b Equal and Equivalent Write expressions where letters stand for numbers Equivalent and equal The distributive property Expressions and exponents Meaning of exponents Relationships between quantities Review
Pacing (# of weeks)	6 - 8 weeks
Standards	 6.EE.A.1: Write and evaluate numerical expressions involving whole-number exponents. 6.EE.A.2: Write, read, and evaluate expressions in which letters stand for numbers. 6.EE.A.3: Apply the properties of operations to generate equivalent expressions. 6.EE.A.4: Identify when two expressions are equivalent. 6.EE.B.5–B.8: Understand solving an equation or inequality as a process of reasoning to find the value(s) that make the equation or inequality true.

Content/Conceptual Knowledge (know)	How to write and evaluate expressions with variables. How to use properties of operations to rewrite expressions. How to solve one-step equations and inequalities.
Skills (be able to do)	 Write and interpret numerical and algebraic expressions. Apply properties of operations to simplify expressions. Solve one-step equations and represent solutions. Identify and generate equivalent expressions.
Essential Questions	 What does it mean for two expressions to be equivalent? How can properties of operations help us manipulate expressions and equations? How can variables and equations represent real-world problems? What strategies help solve equations and understand their solutions?
Enduring Understandings	 Variables represent numbers and can be used to describe mathematical relationships. Expressions and equations can model real-world and mathematical situations. Solving equations involves reasoning about equality and using inverse operations. Equivalent expressions represent the same quantity, even if they look different. Understanding and applying properties of operations helps simplify expressions and solve equations.
Vocabulary	variable, coefficient, constant, expression, equation, inequality, inverse operations,

	solution, equivalent expressions.
Common Learning Experience	 Use number talks to discuss variable meaning and manipulation. Practice with matching expressions to word phrases. Use tiles or diagrams to visualize expressions and equations. Use error analysis to critique and improve peer solutions. Apply real-world scenarios to write and solve equations. Warm ups and cool downs
Assessments	Quizzes and exit tickets
	Student math journals
	Peer discussions and whiteboard responses
	Mid unit and end of unit tests
	Classwork and cool downs
Resources	Algebra tiles
Strategies	Turn and talk