Unit 3: Algebraic Expressions

Content Area: **Math**
Course(s): **Math**
Time Period: **November**
Length: **3-4 weeks**
Status: **Published**

Enduring Understandings

SWBAT:

- Identify parts of an algebraic expression.
- Write algebraic expressions.
- Solve problems using algebraic expressions.
- Interpret algebraic expressions in real-life problems

Essential Questions

How can we:

• Identify parts of an algebraic expression.

- Identify terms and like terms of algebraic expressions.
- Combine like terms to simplify algebraic expressions.
- Write and simplify algebraic expressions to solve real-life problems

• Write algebraic expressions.

- Explain the difference between linear and nonlinear expressions.
- Find opposites of terms that include variables.
- Apply properties of operations to add and subtract linear expressions

• Solve problems using algebraic expressions.

- Explain how to apply the Distributive Property.
- Use properties of operations to simplify algebraic expressions.
- Determine whether two expressions are equivalent

• Interpret algebraic expressions in real-life problems

- Identify the greatest common factor of terms, including variable terms.
- Use the Distributive Property to factor algebraic expressions.

- Write a term as a product involving a given factor

Benchmark Assessments

Schoolwide Benchmark assessments:

- Linkit Benchmarks (Form A in September, Form B in January, Form C in June): Linked to NJSLA standards

Additional Benchmarks used in this unit:

- IXL Diagnostic + continued practice during IXL periods

Formative Assessments

Formative Assessments used in this unit:

- Kahoot! Games

- Quizizz Games

- Homework

- Q & A

- Scavenger Hunts

- Coloring Activities

- Task Cards

- Partner Activities

Summative Assessments

Summative assessments for this unit:

- Chapter Test
- Quizzes

Instructional Materials

1. Big Ideas Math: Math & You 6th Grade Textbook
2. Quizizz
3. Kahoot!
4. Scavenger Hunts
5. Task Cards
6. Coloring Activities
7. GimKit

Standards

MA.7.EE.A.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
MA.7.EE.A.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.
MA.7.EE.B.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.
MA.7.EE.B.4a	Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.
MA.7.EE.B.4b	Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.