

5th Grade Math Unit 1

Content Area	Math
Unit Title/Topic	Operations and Algebraic Thinking
Course/Grade Level	5 th Grade
Unit Summary	Students focus on writing and interpreting numerical expressions; analyzing patterns and relationships.
Time Frame	<i>weeks</i>

Desired Results

Priority Standards:

- 5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- 5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*

Supporting Standards:

- 5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.*

Continuous Foundational Standards:

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Nebraska State Standard

MA 5.1.2.a Use words and symbols to explain the meaning of the identity properties for addition and multiplication. (assessed locally)

MA 5.1.2.b Use words and symbols to explain the meaning of the commutative and associative properties of addition and multiplication. (assessed locally)

MA 5.1.2.c Use words and symbols to explain the distributive property of multiplication over addition.

MA 5.3.1.c Communicate relationships using expressions and equations. (assessed locally)

MA 5.3.2.a Model situations that involve the addition, subtraction, and multiplication of positive rational numbers using words, graphs, and tables.

MA 5.3.2.b Represent a variety of quantitative relationships using tables and graphs. (assessed locally)

MA 5.3.2.c Compare different models to represent mathematical situations. (assessed locally)

MA 5.3.3.a Explain the addition property of equality. (assessed locally)

MA 5.3.3.b Use symbolic representations of the associative property.

MA 5.3.3.e Solve one-step addition and subtraction equations involving common positive rational numbers.

MA 5.3.3.f Identify and explain the properties of equality used in solving one-step equations involving common positive rational numbers. (assessed locally)