# Unit Plan 2: Mathematics - Operations and Algebraic Thinking (Grade 5)

| Content Area: | Mathematics    |
|---------------|----------------|
| Course(s):    | Math 5         |
| Time Period:  | Marking Period |
| Length:       | December       |
| Status:       | Published      |
|               |                |

## **Established Goals/Standards**

Please choose the appropriate Goals/Standards from the Standards tab above.

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| MA.5.OA.A   | Write and interpret numerical expressions.   |
|-------------|--|
| MA.5.OA.A.1 | Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.  |
| MA.5.OA.A.2 | Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.   |
| MA.5.OA.B   | Analyze patterns and relationships.  |
| MA.5.OA.B.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. |

## **Essential Questions**

Please add your Essential Questions by clicking on the Lists tab above.

- How are the values of an algebraic expression and a numerical expression found?
- How can you find the relationship between tow sequences?
- How can you write an algebraic expression?

## **Enduring Understanding**

Please add your Enduring Understandings by clicking on the Lists tab above.

- Patterns that repeat in predictable ways may be used to identify relationships.
- Some mathematical phrases can be represented using a variable in an algebraic expressions.
- To simplify a numerical expression, first compute within brackets/paranthesis; next evaluate any terms with exponents; then do multiplication and division calculations from left to right; lastly add and subtract calculations from left to right.

#### Content

Students will be able to:

- write numerical expressions with variables to represent relations expressed verbally
- evaluate numerical or algebraic expressins with three or more numbers and two or more operations

• extend patterns in a table using given rules and will then look for relationship between corresponding terms in sequence

Vocabulary students will know:

variable

algebraic expression

corresponding

sequence

term

order of operations

#### Resources

**Envision Resources** 

- www.pearsonsuccessnet.com
- textbook
- student online resources
- Daily Common Core Review
- Quick Checks
- Reteaching/Practice
- Math Centers

Unit lesson flipcharts

Online Games from teacher website

Mad Minutes