## $6^{\text {th }}$ Grade Math

## Module 4: Expressions and Equations

## Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 4, Topic E of Eureka Math (Engage New York) students write operations in algebraic form and use correct terminology when reading expressions. Students will use letters to take the place of the number when reading and writing these expressions.


## Focus Area Topic E:

> Expressing Operations in Algebraic Form

## Words to Know:

Sum - term associated with addition.
Difference - term associated with subtraction.

Product - term associated with multiplication.
Quotient - term associated with division


## Reading and Writing Expressions

Students will read and write expressions using the correct terminology to indicate operations, such as sum to indicate addition. Other operational words include synonyms for operational words, such as increased by to indicate addition.

## Example Problem:

Write a word expression for $4 b+c$.

Possible Answers: the sum of $c$ and the product of 4 and $b$ or 4 times $b$ increased by $c$

## Focus Area Topic E:

## Expressing Operations in Algebraic Form

Students are encouraged to use the list of operational words and their synonyms from the graphic organizer in their workbooks when translating algebraic expressions to verbal statements. .


Students replace operation symbols with operational words while maintaining numbers and variables. It is very important that students attend to the order in which the operations are given in the problems to be sure they do not make order of operation mistakes. For example, 5-2 $=\mathbf{3}$ is not the same as $\mathbf{2 - 5}=\mathbf{- 3}$. Similarly, $\boldsymbol{x}-2$ is not the same as $2-x$.


## Writing Expressions from Real World Scenarios

Students will change each real world scenario to an expression using variables and numbers.

## Example Problem:

Write an expression using variables and numbers for the following statement: Crayons and markers were put together and distributed equally to six tables.

Possible Answers: $(a+b) \div 6$ or $\frac{(a+b)}{6}$, where a represents the number of crayons and $b$ represents the number of markers.

Students are encouraged to underline words or phrases within the scenario that are indicative of operations and then translate them into an expression consisting of numbers and variables with operational signs.

Once again, students should attend to the order of operations indicated by the scenario.

