

Chapter 7 Algebraic Expressions

Dear Family,

In this chapter, your child will learn to work with expressions involving variables. Some of the skills your child will practice are:

- identifying the variables and the terms of an expression and evaluating expressions
- simplifying expressions by combining like terms and by using the distributive property

Activity

You can help your child understand and practice combining like terms. Gather two types of objects, such as paper clips and safety pins, or use pieces of paper in two different shapes, such as squares and circles.

- Use the objects to create a model of an algebraic expression:

$$\blacksquare \blacksquare + \bigcirc \bigcirc \bigcirc \bigcirc \quad 2x + 4y$$

Have your child create a model of another expression, using the same objects:

$$\blacksquare + \bigcirc \bigcirc \quad x + 2y$$

Combine your objects to create a model of the sum of the two expressions:

$$\blacksquare \blacksquare \blacksquare + \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \quad 3x + 6y$$

- Repeat the activity with different coefficients. Discuss with your child how the objects themselves do not change when they are combined, but the number of objects does change.

Vocabulary to Practice

A **variable** is a letter that represents an unknown value in an **expression**. The variable in the expression $5c + 1$ is c .

The **terms** of the expression $x + 12$ are x and 12 .

To **evaluate** an expression, **substitute** a number for the variable and simplify it.

The **coefficient** of the term $6a$ is 6 . **Like terms**, terms that use the same variable, can be **combined**: $6a + 9a = 15a$.

Use the **distributive property** to write $3(y + 2)$ as $3y + 6$.

The **factored** form of the expression is $3(y + 2)$ and the **expanded** form is $3y + 6$.



Online Resources

For additional Parent Resources my.hrw.com