

# Modeling Activity

(Use with Lesson 1-1)

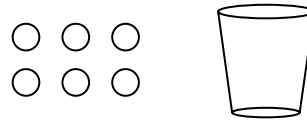
## Evaluating Algebraic Expressions

**Materials:** counters,  cups 

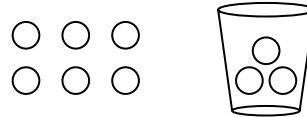
You can use counters and cups to evaluate algebraic expressions.

**Activity 1:** Use cups and counters to evaluate the expression *the sum of 6 and some number* if the unknown value is 3.

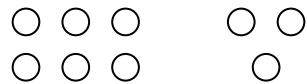
- Use 6 counters and a cup to represent *the sum of 6 and some number*.



- Place 3 counters in the cup.

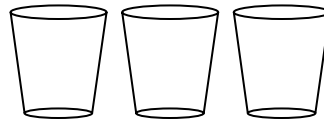


- Empty the cup and count all the counters. There are 9 counters altogether. Therefore, the value of the expression is 9.

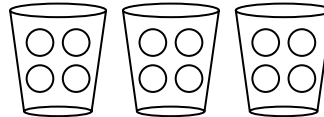


**Activity 2:** Use cups and counters to evaluate *three times some number* if the unknown value is 4.

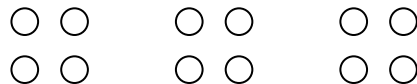
- Use 3 cups to represent *three times some number*.



- Place 4 counters in each cup.



- Empty the cup and count all the counters. There are 12 counters altogether. Therefore, the value of the expression is 12.



## MODEL

Use counters and cups to complete each exercise.

1. Model the phrase *six more than the quantity three times a number*. Place 4 counters in each cup. How many counters are there in all?
2. Model the phrase *three more than the quantity two times a number*. Place 7 counters in each cup. How many counters are there in all?

## WRITE

3. Explain how to evaluate an algebraic expression without using counters and cups.