

# Home Connections Math Activities

## Grade 3

### Number Sense and Numeration

Hop to 500  
Circles and Dots Game  
What's Cooking?  
What's My Missing Number?

# Hop to 500

Number of Players: 2

## Rules:

1. Player 1 thinks of a number between 1 and 10. (e.g. Player 1 picks 5)
2. Player 2 may add either 10 or 100 to that number. (e.g. Player 2 adds on 10 for a sum of 15)
3. Player 1, in turn, adds either 10 or 100 to the number given by Player 2 (e.g. Player 1 adds 100 to 15 for a sum of 115).
4. The two players continue taking turns adding either 10 or 100 each time until they reach the target number.

The winner is the player who gets to the target number of 500 or closest to 500 without going over.

The game can also be played with 1000 as the target number.



Counting by 2s,  
5s, 10s... is called  
skip counting.

## Let's Talk About It

- What was difficult about this game?
- How could you play this game differently?

# Circles and Dots Game

Numbers of Players: 2

## Materials:

- Paper and pencil
- Dice



## Rules:

1. Player 1 rolls one die. The number that comes up is how many circles Player 1 will draw on a piece of paper.
2. Player 1 rolls the second die. This number indicates the number of dots to draw in each circle.
3. Player 1 uses those numbers rolled to make a multiplication equation.

For example: If the first roll is a 3, the player draws 3 circles.  
If the second roll is a 4, the player puts 4 dots in each circle.  
It would look like this:



The multiplication equation would be  $3 \times 4 = 12$ .

4. Now it's Player 2's turn.
5. The answer to a multiplication question is called a product.  
After each round, the player with the largest product earns a point.

Keep playing until one player gets 10 points.

Multiplication involves  
equal groups.

## Let's Talk About It

- Which product did you find most challenging? Explain what you did to find it.

## What's Cooking?

While cooking with someone at home, your child can estimate the quantity of ingredients needed for a recipe. Your child can estimate:

- The number of cookies or pancakes they can make from a bowl of batter.



- The number of small or large marshmallows in 6 cups.



- The number of pieces of macaroni in 2 cups.



- The amount of pasta for a family dinner.



Estimation is an attempt to get as close as is reasonable to the actual number without counting each one.

## Let's Talk About It

- What items were easier to estimate? Why?
- What was the hardest to estimate? Why?
- Did you estimate too much or too little? Why?

# What's My Missing Number?

Have your child fill in the blanks to create number sentences (see example), and explain his or her reasoning.

Example:

$$\boxed{12} \quad \boxed{12}$$

$$\boxed{12} \quad \boxed{12}$$

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

$$\underline{12} \times \underline{1} = \underline{12}$$

$$\underline{12} + \underline{12} = \underline{24}$$

$$\underline{12} - \underline{12} = \underline{0}$$

A number sentence is an equation expressed using number and symbols.

## Let's Talk About It

- Which number sentences did you find easy to make? Why?
- Which number sentences did you find hard to make? Why?
- Create your own number sentences.

# What's My Missing Number?



10 8

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

8 6

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

4 5

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

7 14

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

3 6

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

12 2

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

3 5

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

9 6

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$

7 9

$___ \times ___ = ___$

$___ + ___ = ___$

$___ - ___ = ___$