

# Lesson 7

COMMON CORE STANDARD CC.5.NBT.1

Lesson Objective: Recognize the 10 to 1 relationship among place-value positions.

## Place Value and Patterns

You can use a place-value chart and patterns to write numbers that are 10 times as much as or  $\frac{1}{10}$  of any given number.

Each place to the right is  $\frac{1}{10}$  of the value of the place to its left.

	$\frac{1}{10}$ of the hundred thousands place	$\frac{1}{10}$ of the ten thousands place	$\frac{1}{10}$ of the thousands place	$\frac{1}{10}$ of the hundreds place	$\frac{1}{10}$ of the tens place
<b>Hundred Thousands</b>	<b>Ten Thousands</b>	<b>Thousands</b>	<b>Hundreds</b>	<b>Tens</b>	<b>Ones</b>
10 times the ten thousands place	10 times the thousands place	10 times the hundreds place	10 times the tens place	10 times the ones place	

Each place to the left is 10 times the value of the place to its right.

Find  $\frac{1}{10}$  of 600.

$\frac{1}{10}$  of 6 hundreds is 6 tens.

So,  $\frac{1}{10}$  of 600 is 60.

Find 10 times as much as 600.

10 times as much as 6 hundreds is 6 thousands.

So, 10 times as much as 600 is 6,000.

Use place-value patterns to complete the table.

Number	10 times as much as	$\frac{1}{10}$ of
1. 200		
2. 10		
3. 700		
4. 5,000		

Number	10 times as much as	$\frac{1}{10}$ of
5. 900		
6. 80,000		
7. 3,000		
8. 40		

Name \_\_\_\_\_

**Place Value and Patterns**

Complete the sentence.

1. 40,000 is 10 times as much as 4,000 | 2. 90 is  $\frac{1}{10}$  of \_\_\_\_\_

3. 800 is 10 times as much as \_\_\_\_\_ | 4. 5,000 is  $\frac{1}{10}$  of \_\_\_\_\_

Use place-value patterns to complete the table.

Number	10 times as much as	$\frac{1}{10}$ of
5. 100		
6. 7,000		
7. 300		
8. 80		

Number	10 times as much as	$\frac{1}{10}$ of
9. 2,000		
10. 900		
11. 60,000		
12. 500		

**Problem Solving** 

13. The Eatery Restaurant has 200 tables. On a recent evening, there were reservations for  $\frac{1}{10}$  of the tables. How many tables were reserved?

14. Mr. Wilson has \$3,000 in his bank account. Ms. Nelson has 10 times as much money in her bank account as Mr. Wilson has in his bank account. How much money does Ms. Nelson have in her bank account?