Name: _____ Period: _____ Date: _____

Place Value of Whole Numbers Guided Notes **Math 4**

What is place value?

Place value is the value of a digit depending on its **location in a number**. Each place value has a number from 1 to 9. We count up to 9 in each place and when we get to 10 we move into the next place value.

That means that **the place value to the left of the digit is 10 x larger than the digit to its right**. And that means **the place value to the right of the digit is 10 x smaller than the digit to its left.**

We start with ones and count up to 9, then we move on to tens. That means there are 10 ones in 1 ten. And that 1 ten is 10 times bigger than 1.

For example, there are 10 tens in 1 hundred so that means that **100 is ten times bigger than 10** (10 x 10 = 100)

That also means that
10 is 10 times smaller than 100 (100 ÷ 10 = 10)

Name: _____ Period: _____ Date: _____

Place Value of Whole Numbers Guided Notes **Math 4**

10 Ones = 1 x 10 = 1 Ten

10 Tens = 10 x 10 = 1 Hundred

10 Hundreds = 10 x 100 = 1 Thousand

10 Thousands = 10 x 1,000 = 1 Ten Thousand

10 Ten Thousands = 10 x 10,000 = 1 Hundred Thousand

10 Hundred Thousands = 10 x 10,000 = 1 Million

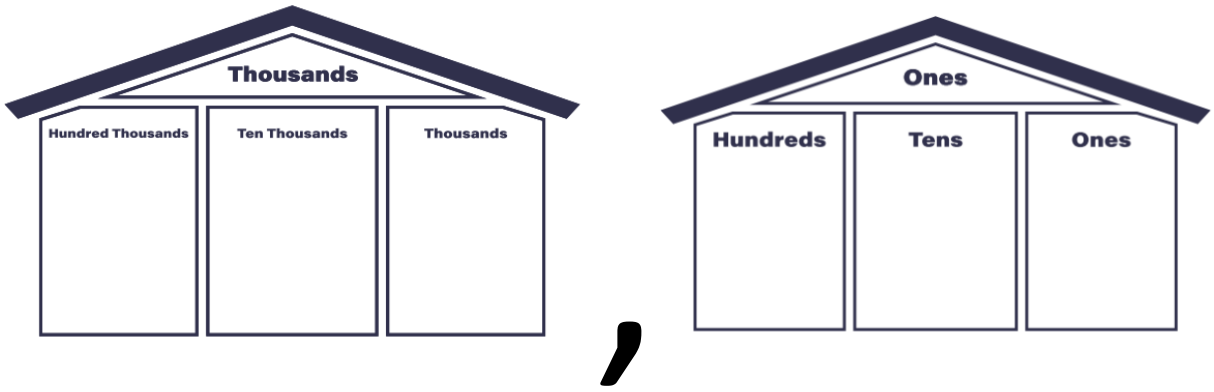
Notice that the digit **2** has a different value in the number **234,567** and **43,291**.

In **2**,468, the 2 represents 2,000. In 43,**2**91, the 2 represents 200.

Name: _____ Period: _____ Date: _____

Place Value of Whole Numbers Guided Notes Math 4

Put the number 325,698 in the houses.

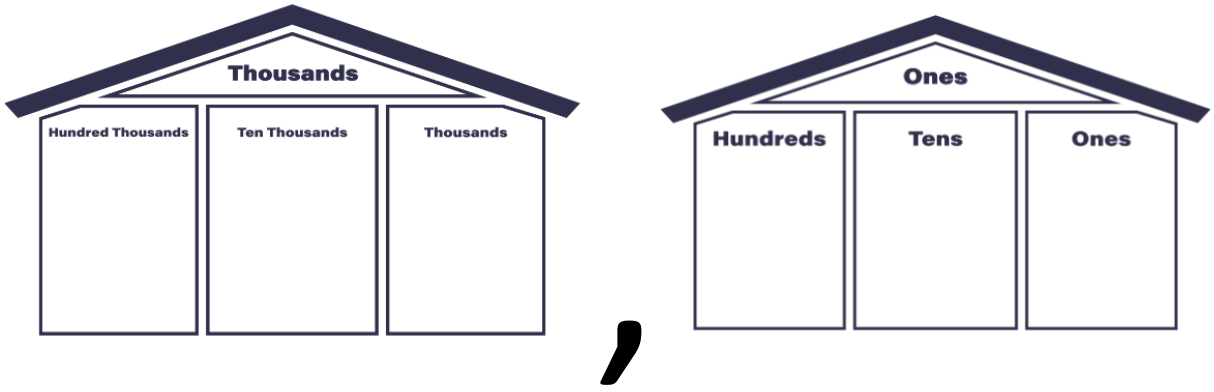


Time to Think

1. Would you rather have 5 ones or 5 hundreds? Why?

2. How many tens are in one thousand?

Draw a one dollar bill in the place value chart.



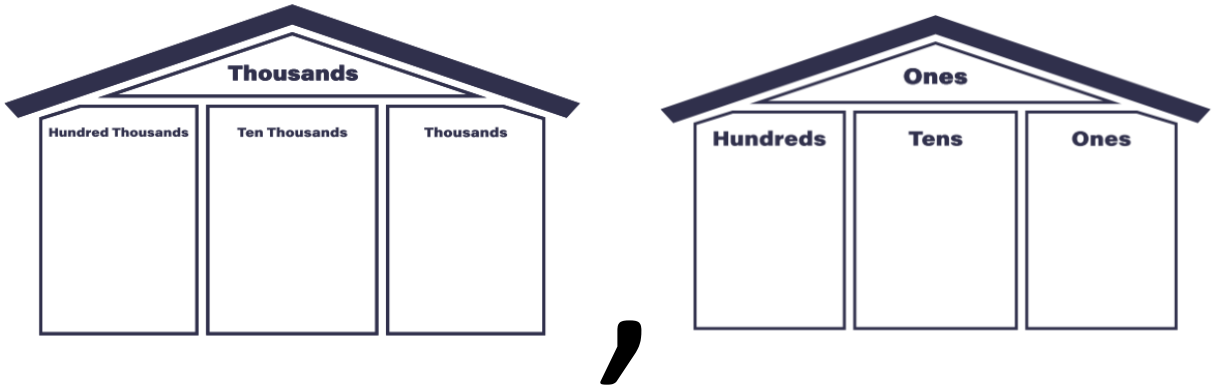
Place Value of Whole Numbers Guided Notes **Math 4**

Now draw nine more one dollar bills in the place value chart.

What larger unit can I make?

When we exchange the ten ones for a _____, the _____ becomes _____ times as large.

Draw a ten dollar bill in the place value chart.



Now draw nine more ten dollar bills in the place value chart.

What larger unit can I make?

When we exchange the ten ten dollar bills for a _____, the _____ becomes _____ times as large.

Name: _____ Period: _____ Date: _____

Place Value of Whole Numbers Guided Notes Math 4

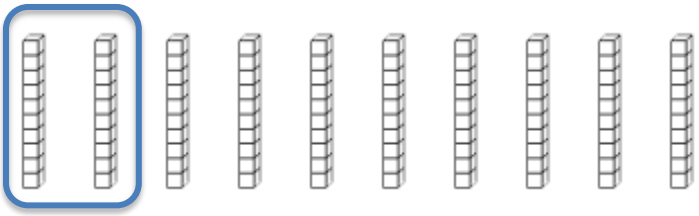
465,312

Shade in the place value shapes and complete the table below to represent the number.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
100,000 100,000 100,000 100,000 100,000 100,000	10,000 10,000 10,000 10,000 10,000 10,000	1,000 1,000 1,000 1,000 1,000 1,000	100 100 100 100 100 100	10 10 10 10 10 10	1 1 1 1 1 1

Time to think:

Using the base ten blocks below, circle four groups of 2 ten blocks. The first one is done for you. Then complete the multiplication statement.



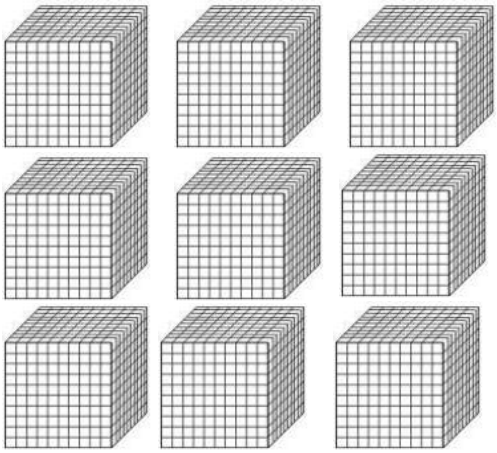
4 x 20 = _____

Place Value of Whole Numbers Guided Notes Math 4

Time to think

What do you notice about the multiplication statement and the answer? Write a sentence.

Using the hundred blocks below, circle three groups of 2 hundreds blocks. Then complete the multiplication statement.



3 x 200 = _____

Time to think

What do you notice about the multiplication statement and the answer? Write a sentence.

Place Value of Whole Numbers Guided Notes Math 4

Time to Think

Using what we learned about place value and using zeros as a tool:

1. What is 800 ÷ 4?

2. What about 1000 ÷ 10?

