

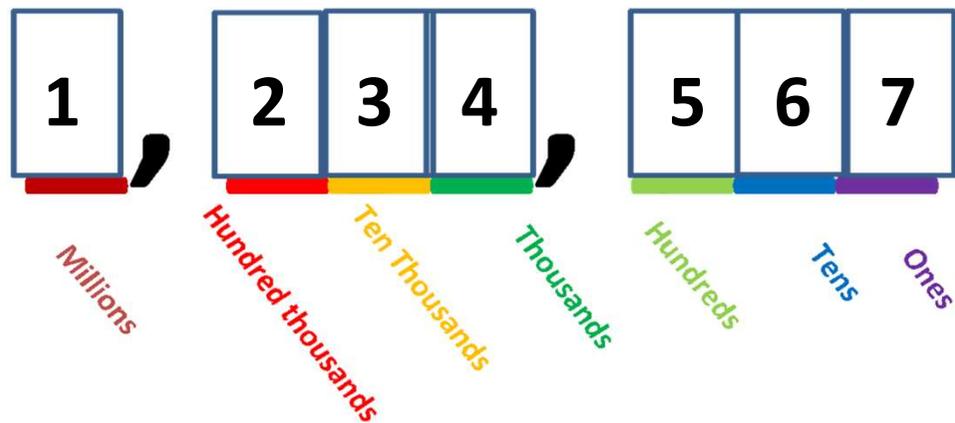


# Place Value of Whole Numbers

## Unit 1 Lesson 1

# 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 also means

**the place value to the right of the digit is 10 x smaller than the digit to its left.**

# What is place value?

For example, there are 10 tens in 1 hundred so that means that

**100 is ten times bigger than 10** (  $10 \times 10 = 100$  )

That also means that

**10 is 10 times smaller than 100** (  $100 \div 10 = 10$  )

**10 Ones = 1 x 10 = 1 Ten**

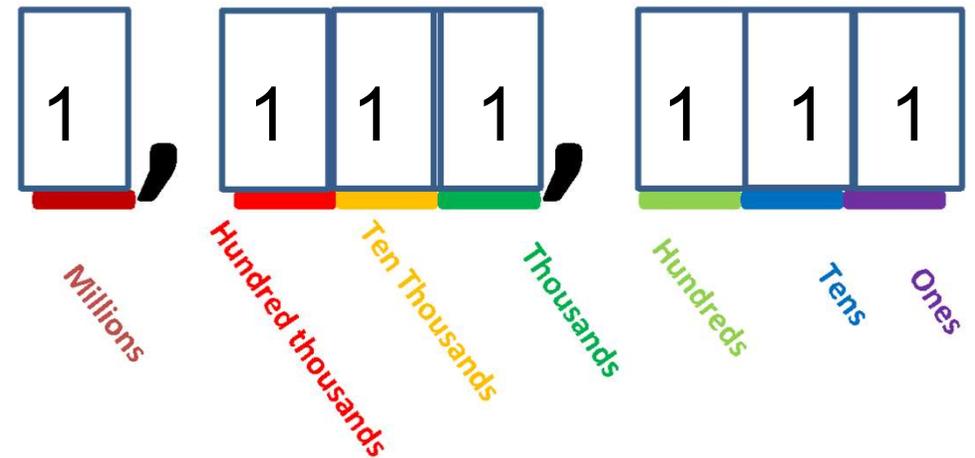
**10 Tens = 10 x 10 = 1 Hundred**

**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 100,000 = 1 Million**



## What is place value?

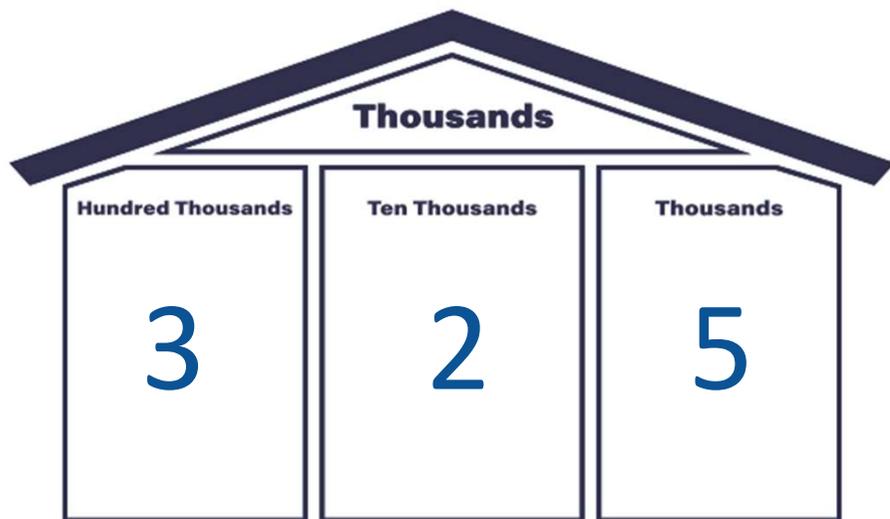
### Example:

In 2,468, the 2 represents 2,000.

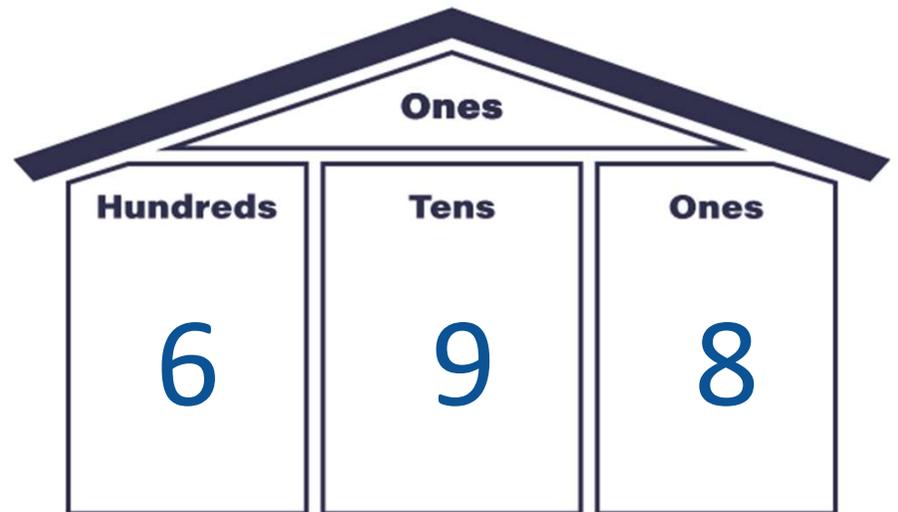
In 43,291, the 2 represents 200.

Look at the location of the digit 2.  
The digit 2 has a different value in the number 2,468 and 43,291.

Put the number 325,698 in the houses.



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# Time to Think

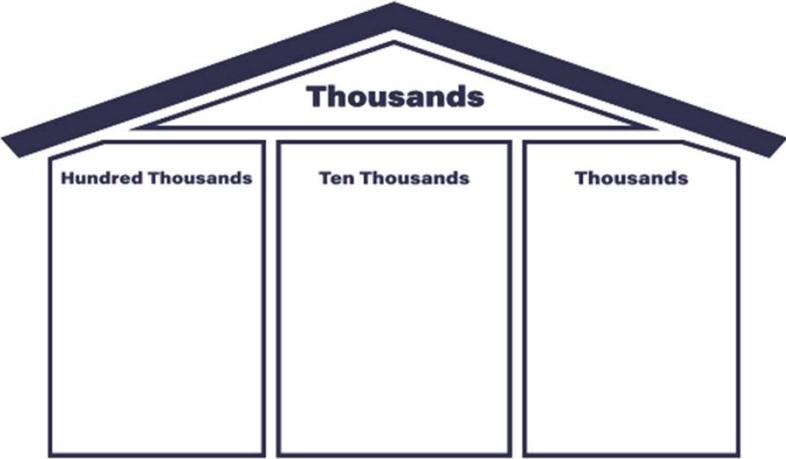
1. Would you rather have 5 ones or 5 hundreds? Why?

**I would rather have 5 hundreds because they are worth more than 5 ones.**

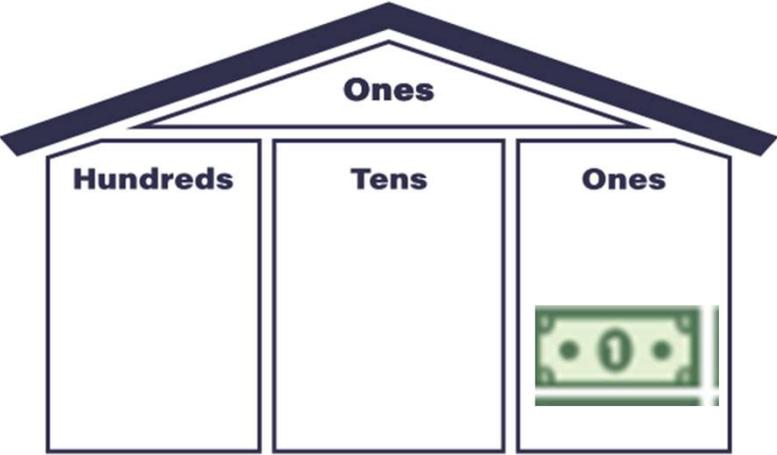
2. How many tens are in one thousand?

**There are 100 tens in one thousand.**

Draw a one dollar bill in the place value chart.



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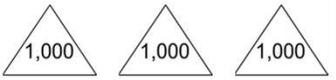
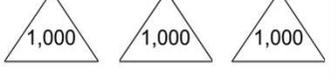
Now draw nine more one dollar bills in the place value chart.



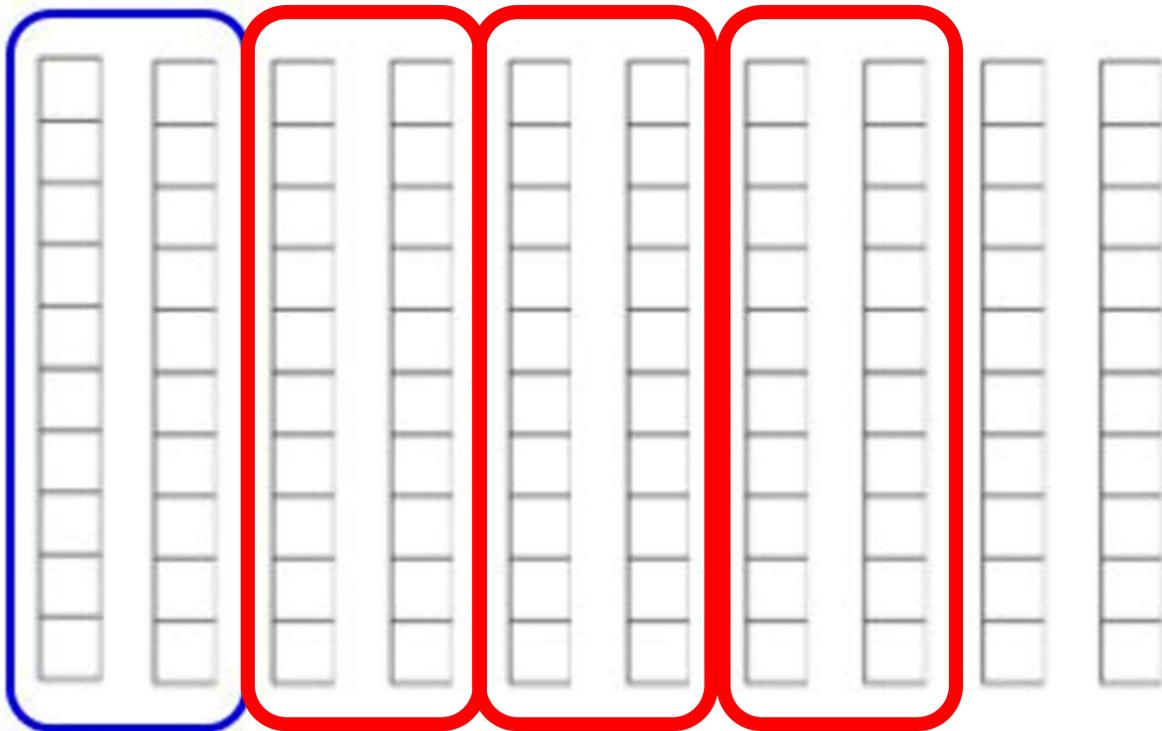
When we exchange the ten ones for a ten, the 1 becomes 10 times as large.

Color in the shapes to match the number given

412,976

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
					
					
					

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.

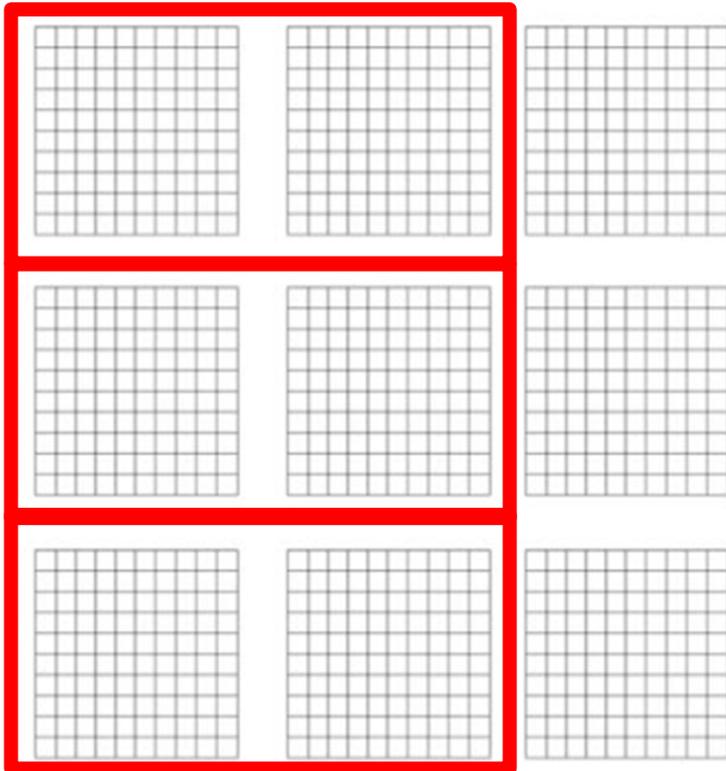


$$4 \times 20 = \underline{80}$$

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

**You can multiply  $4 \times 2$  and then add a zero.**

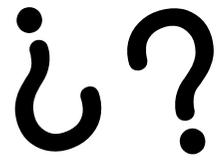
Using the hundred blocks below, circle three groups of 2 hundreds blocks. Then complete the multiplication statement.



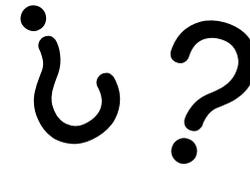
$$3 \times 200 = \underline{600}$$

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

You can multiply  $3 \times 2$  and then add 2 zeros.



Time to Think



1. Using what we learned about zeros, what is  $800 \div 4$ ?

**➤** 200 because  $8 \div 4 = 2$  and then you can add the two zeros from the 800.

2. What about  $1000 \div 10$ ?

**➤** 100 because  $10 \div 10 = 1$  and then you have two zeros left.