

Name \_\_\_\_\_

How do you write the number 0.0513 in scientific notation?

**Step 1** Write the first factor.

Move the decimal point to the right of the first nonzero digit.

$$0.0513 \rightarrow 5.13$$

**Step 2** Write the second factor.

Count the number of digits before the decimal point.

$$0.0513 \rightarrow 10^{-2}$$

0.0513 written in scientific notation is  $5.13 \times 10^{-2}$ .

As of July 1, 2014, the population of India was about 1,267,000,000. How can you write this number in scientific notation?

1. Move the decimal point to the right of the first digit. What is the first factor?
2. Count the number of digits after the decimal point. How many places did you move the decimal point?
3. Did you move the decimal point to the right or to the left? What does this tell you about the power of 10 in the second factor?
4. What is the second factor written as a power of 10?
5. Write the population of India in scientific notation.

### On the Back!

6. There are 3,153,600 seconds in a year. How can you write this number in scientific notation?