

Name \_\_\_\_\_

Date \_\_\_\_\_

## Scientific Notation Word Problems - Step-by-Step Lesson

### Lesson 1 Word Problem:

In August 2001, there were approximately 2 million people living in Apple City. In August 2011, that population grew to 6 million people. How many more people lived in Apple City in 2011 in comparison to 2001? Write your answer in scientific notation.



### Explanation:

We need to find the difference between the two population sizes.

First we write the population of 2011, 6,000,000 and the population of 2001, 2,000,000.

To find the increased population we have to subtract the population of 2001 from 2011.

$$6,000,000 - 2,000,000 = 4,000,000$$

In scientific notation we move the decimal point as many times as we need to until we get the non-zero number in the ones place. It takes six moves to the left to reach 4.0. The ten is raised to the sixth power.

It's written as:  $4.0 \times 10^6$

