

Name \_\_\_\_\_

Date \_\_\_\_\_

## Powers of Ten and Scientific Notation - Guided Lesson Explanation

### Explanation#1

The positive exponent of 10 tells how many places to the right to move the decimal point. In this case seven places to the right.

Answer is: 37,500,000

### Explanation#2

This number is less than one. This tells us that every tens place we move will result in a negative exponent.

Move the decimal point to the right until you are between a ones and tenths place. We moved to the right five times so the power of ten is negative five.

Answer is:  $8.96 \times 10^{-5}$

### Explanation#3

$8 \times 10^6$  is larger because the exponent is larger. You could also calculate the exact number as well. They would be:

300,000          or          8,000,000

