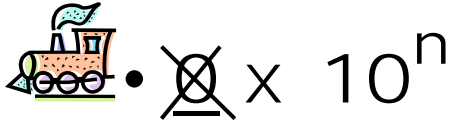


## Scientific Notation

Name \_\_\_\_\_



1. Here are some examples of numbers written in standard notation:
2. Here are some examples of numbers written in scientific notation:
3. Find the product for each of the following. Look for a pattern, so you can answer question #4.

$$6.1 \times 10^0 = \underline{\quad}, \quad 6.1 \times 10^1 = \underline{\quad}, \quad 6.1 \times 10^2 = \underline{\quad}, \quad 6.1 \times 10^3 = \underline{\quad}.$$

$$6.1 \times 10^4 = \underline{\quad}, \quad 6.1 \times 10^5 = \underline{\quad}, \quad 6.1 \times 10^6 = \underline{\quad}, \quad 6.1 \times 10^7 = \underline{\quad}.$$

4. Explain what happens to the decimal point when you multiply by a power of ten.

5. When changing a number in standard form to scientific notation, move the decimal to the right of the \_\_\_\_\_ digit. Then, count the number of places you moved the decimal. The number of places you moved the decimal is the \_\_\_\_\_ of 10 you have multiplied by in order to move that decimal.

$$52,000,000. \rightarrow 5.2 \underbrace{0000000}_{\text{seven places}} = 5.2 \times 10^7 \text{ or } 5.2e7$$

6. Here are five examples of numbers I have changed from standard notation to scientific notation: (write the standard number and the scientific notation)