

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Unit 1 - Topic 1

## Scientific Notation

Convert the numbers below into scientific notation.

1. 6,460,000,000 \_\_\_\_\_

2. 70 \_\_\_\_\_

3. 8400 \_\_\_\_\_

4. 0.000013 \_\_\_\_\_

5. 0.01 \_\_\_\_\_

Convert the following numbers to common notation.

6.  $2.0 \times 10^5$  \_\_\_\_\_

7.  $5.1 \times 10^0$  \_\_\_\_\_

8.  $1.26 \times 10^{-6}$  \_\_\_\_\_

9.  $8.000 \times 10^4$  \_\_\_\_\_

10.  $7.416 \times 10^1$  \_\_\_\_\_

Calculate the following. Give the answer in correct scientific notation.

11)  $4.53 \times 10^5 + 2.2 \times 10^6$  \_\_\_\_\_

12)  $6.18 \times 10^{-45} + 4.72 \times 10^{-44}$  \_\_\_\_\_

13)  $1113.0 - 14.6 \times 10^2$  \_\_\_\_\_

14)  $3.95 \times 10^2 \div 1.5 \times 10^6$  \_\_\_\_\_

15)  $(2.5 \times 10^9)(6.45 \times 10^4)$  \_\_\_\_\_

16)  $(6.88 \times 10^2)(3.45 \times 10^{-10})$  \_\_\_\_\_

### Example

$$16,400 = 1.64 \times 10^4$$

The exponent is equal to the number of places the decimal is moved.

★ decimal left → positive exponent

★ decimal right → negative exponent