

Name: Key

More Practice- Conversions, Significant Figures, and Scientific Notation

Metric Conversions:

Using K H D (b) d c m, answer the following questions:

1.) 185 km = 18,500,000 cm
185 00000

2.) 6,000,000 mm = 6,000 m

3.) 17 kg = 17,000 g
17000

4.) 0.00000089 kg = .89 mg

Non-metric Conversions:

Using the given conversion factors, answer the following questions:

1 mile = 1.609 km

1 lb = 453.6 g

1 m = 3.28 ft

5.) Convert 37 miles to km

$$\frac{37 \text{ mi} \mid 1.609 \text{ km}}{1 \text{ mi}} = 59.53 \text{ km}$$

6.) Convert 100,800 grams to lbs

$$\frac{100,800 \text{ g} \mid 1 \text{ lbs}}{453.6 \text{ g}} = 222.2 \text{ lbs}$$

7.) Convert 45.87 feet to meters

$$\frac{45.87 \text{ ft} \mid 1 \text{ m}}{3.28 \text{ ft}} = 13.98 \text{ m}$$

Significant Figures

How many significant figures are in each number?

8.) $7,810,000 \leftarrow$ 3 Absent

9.) 82,003 \leftarrow 5 Absent

10.) 1.300 4 present

11.) 0.00072 2 present

12.) 0.005003 4 present

13.) 7,400.0 5 present

Scientific Notation

Write each expression in scientific notation:

14.) 758,000,000 7.58×10^8

15.) 0.00023 2.3×10^{-4}

16.) 1,040,000,000,000 1.04×10^{12}

Standard Notation

Write each expression in standard notation:

17.) 2.6×10^7 26,000,000

18.) 4.68×10^4 46,800

19.) 3.8×10^{-5} 0.000038