

Name _____
Honors Chemistry
Sig Figs Worksheet

$$\begin{array}{r} 13400 \\ -379 \\ \hline \end{array}$$

$$.1146 / .045 =$$

$$321.3 * 78 =$$

$$\begin{array}{r} 376 \\ +130 \\ \hline \end{array}$$

$$.09 * 9634.1 =$$

$$640 / 55.2 =$$

$$9.23 \times 10^{23} * 5.65 \times 10^{-14} =$$

$$4.23 \times 10^3 - 5.75 \times 10^2 =$$

$$7.23 \times 10^{30} + 4.7 \times 10^8 =$$

$$6.78 \times 10^{10} / 3.2 \times 10^6 =$$

Dimensional Analysis (you must show work to receive credit) **report answers to the correct number of sig figs.**

$$1 \text{ in} = 2.54 \text{ cm}$$

$$1 \text{ yd} = .9144 \text{ m}$$

$$1 \text{ mile} = 1.6 \text{ km}$$

$$6.5 \text{ cm}^2 = 1 \text{ in}^2$$

$$2.2 \text{ lbs} = 1 \text{ kg}$$

$$5.0 \text{ mL} = 1 \text{ tsp}$$

$$1 \text{ cup} = 0.24 \text{ L}$$

$$3.8 \text{ L} = 1 \text{ gal}$$

How many mL are in 3.5 teaspoons?

A faucet has a flow rate of 0.17 gal/s, what is that in L/s?

A corvette can go 195 miles/hr, how fast is that in m/s? (m/s is meters/second)

Calculate the density of all objects in g/mL. Do NOT forget units and to report your answer to the correct number of **sig figs!!**

A liquid has a mass of 34.24 g and a volume of 25.4 mL. What will the density of the object be? Will it float in water?

An object cubic solid has dimensions of 12.31 cm x 14.39 cm x 35.23 cm and a mass of 12.1 kg. What is its density? Will it float in water?

An irregular solid with a mass of 35.3 g is placed in a graduated cylinder. The original volume in the cylinder was 13.4 mL, and it rose to 25.4 mL after the solid was added. What is the density of the object? Will it float in water?