Student Name: _____ Per: _____ Date: _____ Score: _____

Below are some conversion factors used in the SI System.

kilo- = 1000	**centi- = 1/100**	**milli- = 1/1000**	**Other Conversions**
1 kg = 1000 g 1 km = 1000 m 1 kL = 1000 L	100 cm = 1 m	1000 mg = 1 g 1000 mm = 1 m 1000 mL = 1 L	1 mL = 1 cm^3 1 L = 1 dm^3 1 cm = 10 mm

Solve each of the following problems. Show the correct set-up and always use units.

1. Determine the number of mm in 1600 m.

2. Determine the number of m in 1600 mm.

3. Determine the number of mm in 14.3 cm.

4. How many seconds are in 4.3 years?

5. Convert 2875 cm^3 to liters.

6. The density of lead (Pb) is 11.34 g/cm^3. Find the density of Pb in kg/dm^3.

7. Convert 5.2 cm of magnesium (Mg) ribbon to mm of Mg ribbon.

8. Convert 0.049 kg sulfur (S) to g of S.

9. Convert 0.020 kg of tin (Sn) to mg of Sn.

10. Convert 150 mg of acetylsalicylic acid (aspirin) to g of aspirin.

11. Convert 2500 mL of hydrochloric acid (HCl) to L of HCl.

12. A metallurgist is making an alloy that consists of 325 g of chromium (Cr) and 2.5 kg of iron (Fe). Find the total mass of the mixture in kg.

13. How many mL of water (H_2O) will it take to fill a 2 L bottle that already contains 1.87 L of H_2O?

14. Convert 150 cm of copper (Cu) wire into mm of Cu wire.

15. Convert 0.5 g of sodium (Na) to kg of Na.