**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Directions: Calculate the density in the following word problems. Show all your work and make sure your answer includes units.**

**Density WORD PROBLEMS**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. A block of aluminum occupies a volume of 15.0 mL and weighs 40.5 g. What is its density?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_2. Mercury metal is poured into a graduated cylinder that holds exactly 22.5 mL. The mercury used to fill the cylinder weighs 306.0 g. From this information, calculate the density of mercury.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_3. A rectangular block of copper metal weighs 1896 g. The dimensions of the block are 8.4 cm by 5.5 cm by 4.6 cm. From this data, what is the density of copper? (hint: find the volume of a block first)

\_\_\_\_\_\_\_\_\_\_\_\_\_4. A block of lead has dimensions of 4.50 cm by 5.20 cm by 6.00 cm. The block weighs 1587 g. From this information, calculate the density of lead.

\_\_\_\_\_\_\_\_\_\_\_\_5. 28.5 g of iron shot is added to a graduated cylinder containing 45.50 mL of water. The water level rises to the 49.10 mL mark, from this information, calculate the density of iron.