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Density Quiz

Use the density data table to answer the questions below.

- A. Determine the volume in milliliters occupied by 300 g of mercury.
- B. Determine the mass of an aluminum cube with side lengths of 2 cm.
- C. A student obtains 12 mL of water in a 25 mL graduated cylinder. When a 4 oz irregularly shaped object is placed in the cylinder, the water level is 22.8 mL. Determine the density of the object and its identity.
- D. Pumice has a density of 0.951 g/cm^3 . Will pumice float on water? Gasoline?
- E. A cookie recipe requires 1 cup of sugar which has a mass of 200 g. Determine the volume of the sugar.
- F. In units of liters, determine the volume of 10 lbs of air.
- G. A spherical container can hold a maximum amount of 500 g of honey. Determine the radius of the container.
- H. Determine the density of water with units of kg/m^3 .
- I. Which has a greater mass - 100 cm^3 of copper or 100 cm^3 of lead?
- J. A 14 gauge copper wire has a diameter of 0.06410 cm and a mass of 27.4 g. Determine the length of the wire with units of meters.