Density can be used as a conversion factor between mass and volume

The specific gravity of a substance is the density of that substance divided by the density of water at the same temperature

Specific gravity does not use units

Density of substance / Density of water at same temperature

The density of water is generally close to 1 g / mL on Earth

**Common Question**

What volume of *common liquid solvent* would you use if you needed 15.2 g? The density of the solvent will be provided. The temperature will also be provided

In this instance, the density is a conversion factor between the mass needed and the volume of the solvent you would have to use to acquire that mass.

*Mass of solvent = 15.2 g*

*Density of solvent = given*

*Volume of common solvent = ?*

*Density = g / Ml*

15.2 g solvent