$D = \frac{m}{V}$ $m = D \times V$ $V = \frac{m}{D}$

Ex2) Find the volume of an object with a density of 18.7g/cm^3 and a mass of 6g.

$D = \frac{m}{V}$ $m = D \times V$ $V = \frac{m}{D}$

Ex3) Find the mass of an object with a Volume of 10 L and density of 14 g/L

$D = 14\,g/L$

$m = ?$

$V = 10\,L$

$m = D \times V$

$= 14\,g/\cancel{L} \times 10\cancel{L}$

$= 140\,g$

Which is easier to do?

Water exerts an upward force that helps support you when you do a handstand.

Buoyancy - is the ability of a fluid to support an object floating in or on the fluid.

The particles of a fluid apply a force in a upward force which is opposite to the force of gravity.

- Buoyancy is measured in Newtons (N)

Recall Gravity - is a natural force that causes an object to move toward the center of the earth.

Floating occurs when an object does not fall in air or sink in water, but remains suspended in fluid.

Displace - To move something out of the way. Example) A solid object can displace water out of a container.