

Name: \_\_\_\_\_

# Buoyancy Notes

**What is Buoyancy?** An object is buoyant in water due to the amount of water it **displaces** or 'pushes aside'. If the weight of water that is displaced by an object in water exceeds the weight of the object then the object will float.

**Density:** ( $D = M \div V$ ) when the volume of an object is *LARGER* than the mass, the density is less than  $1.0 \text{ g/cm}^3$  and the object will **FLOAT** in water.

**BrainPOP:** Answer the following questions about Buoyancy.

1. Positive Buoyancy -
2. Negative Buoyancy -
3. Neutral Buoyancy -
4. The amount that the water level rises is \_\_\_\_\_ to the volume of water that is displaced by the object.
5. The force trying to float an object is \_\_\_\_\_ to the weight of the water that is displaced by the object.
6. Why does a boat float if the material it is made from, for example metal, is denser than water?