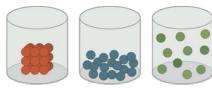


## **Density of Solids, Liquids, and Gas**

The only way the density of a substance will change is if it changed states.

Ex) Liquid water is a different density than solid water and water vapor



## **Water**

Both liquid water and water vapor have the same particles and the particles are all the same size.

According to the particle theory of gas, gas particles have more space between them than liquid particles. Therefore, water vapor would have fewer particles than liquid water.

The density of the water vapor is less than the density of the liquid water.