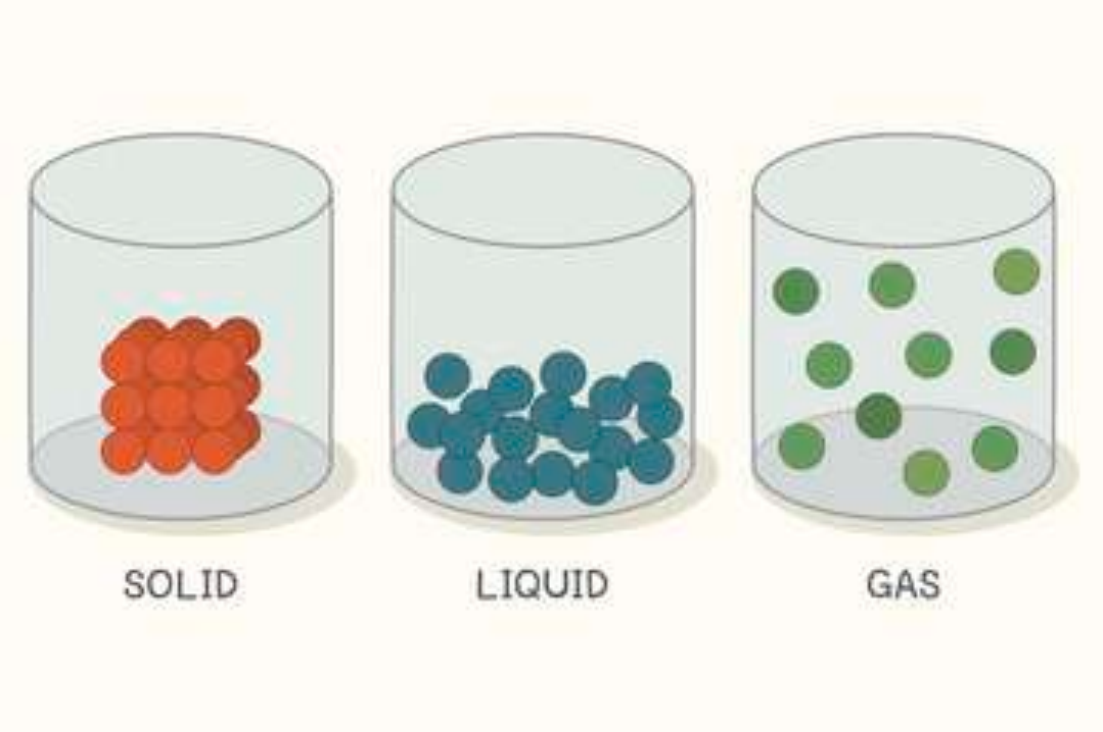
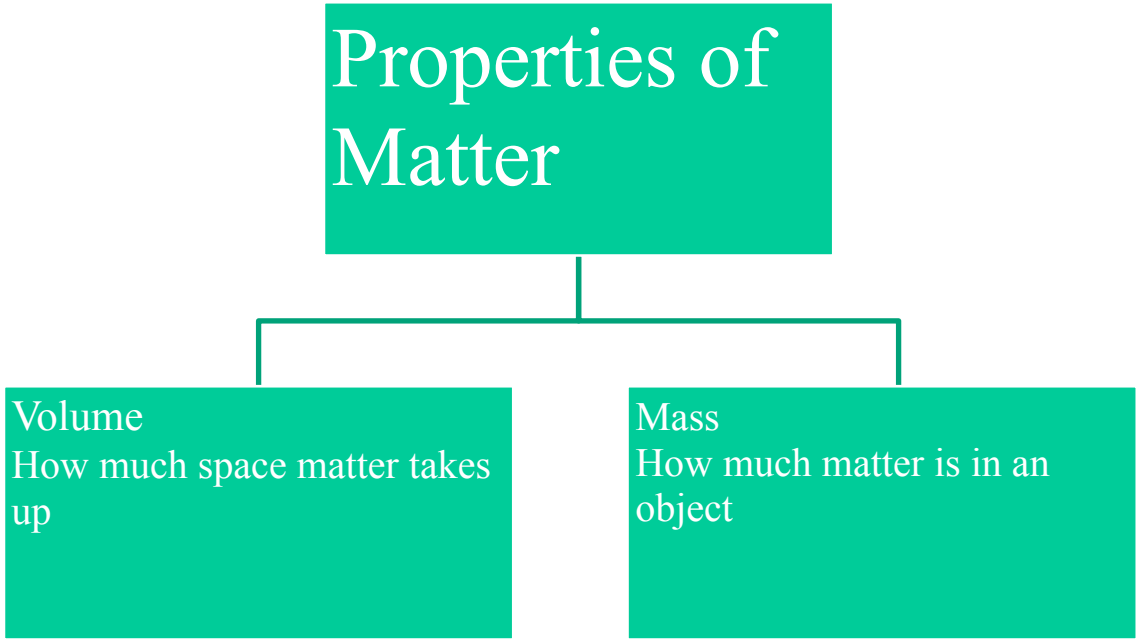
Matter



Emma Parker 5-D

What is Matter?

Matter is anything that has mass and takes up space



Mass and Weight: Are They Different?

Mass vs. Weight	
Mass	**Weight**
Mass is the amount of matter in and object Mass is usually measured in kilograms The tool used is a double pan scale Location doesn't affect the measurement because mass can't change no matter where you are	Weight is is the force of gravity between Earth and an object Weight is measured in pounds and newtons The tool used to measure weight is pan scale Location affects the measurement because on the moon there is less gravity so the object is lighter

Density

Density is how massive something is for its size.

$$\frac{\text{Mass}}{\text{Volume}}$$

Density is how massive something is for its size. Density can effect buoyancy because an object's ability to float depends on if the liquid is more dense or the object is more dense. So if the object is more dense than the liquid it will sink. But if the liquid is more dense the object the object will float. A solid is very dense but the particles in a solid are packed together tightly, and don't have much room to move around. The particles that make it up are packed together in an orderly fashion. A liquid, usually is less dense than a solid. But the particles that make it up bump into each other and are not orderly. A gas is normally less dense than a liquid. But the particles that make it up float around aimlessly. The density of gasses depend on temperature and pressure. Density is also measured in kilograms per cubic meter. Density effects many things around us.

Conductor or Insulator?

A conductor allows energy to flow through it easily

An insulator doesn't permit energy to flow through it easily

Matter

Properties

Mass
Volume
Weight
Density

Careers

Construction Workers
Engineers
Astronauts
Scientists

Conductors and Insulators

References:

http://worldbookonline.com/student/article?id=ar154500&st=density#tab=homepage

Daniel, L., Hackett, J., Moyer, R., & Vasquez, J. (2006) Science. New

York: Macmillan/McGraw-Hill.