

# Matter

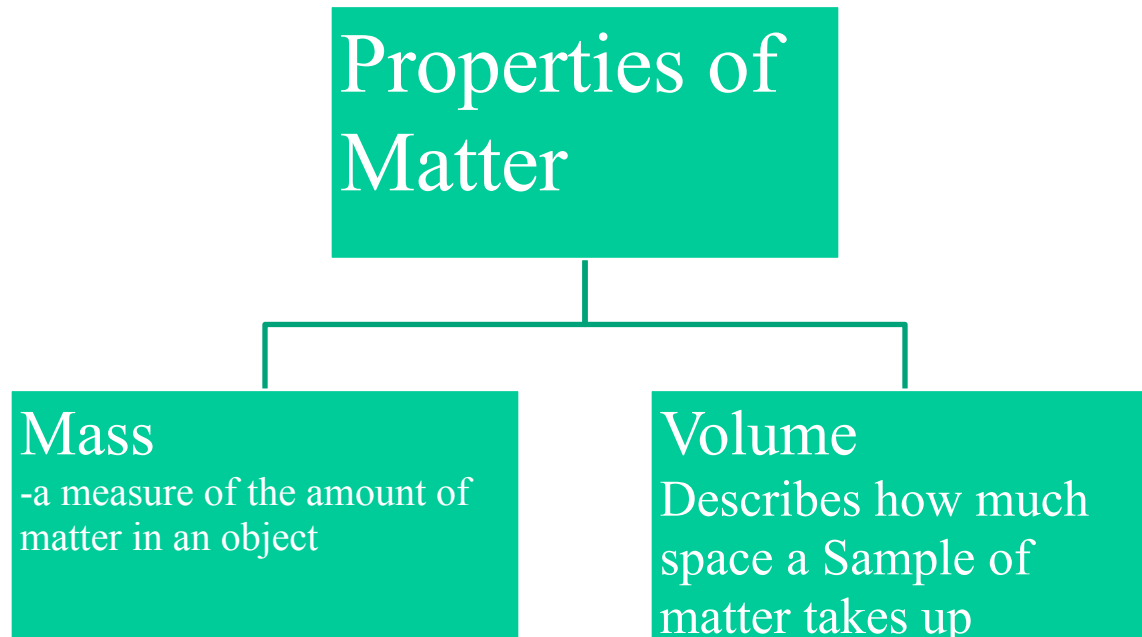


Silas Davis 5-0

# What is Matter?

Definition of matter: anything that has mass and takes up space

Textbook pages :  
E6



# Mass and Weight: Are They Different?

Textbook pages :

E6-E7

## Mass vs. Weight

### Mass

A measure of the amount of matter in an object.

Mass's unit of measurement is kilograms.

If you were on the moon or on Mars or earth your Mass would not change.

### Weight

The force of gravity between one object and another.

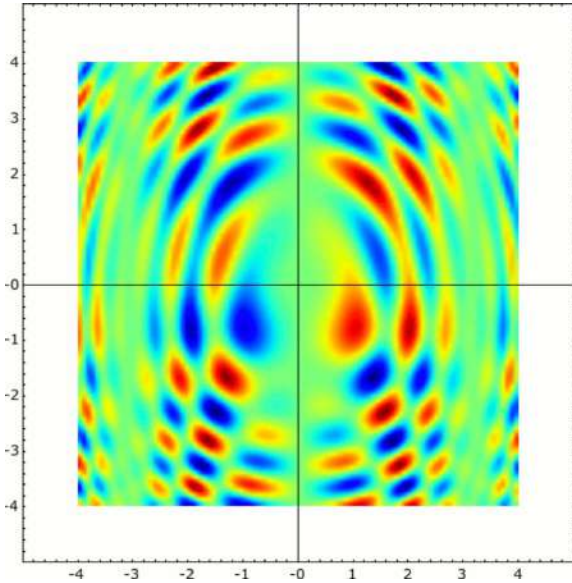
Weight's unit of measurement are newtons.

If you change your location your weight will change but if you stayed where you are your weight will not change.

# Density

Mass divided by a  
sample of it's volume.

Density  
Formula



$$\frac{\boxed{\phantom{000000}}}{\boxed{\phantom{000000}}}$$

Density is mass divided by a sample of volume. Did you know the density of an object tell us how massive something is for its size. It compares somethings mass with its volume. As long as an objects temperature does not change the density of the object will not change. Did you know that density could also be used to help identify materials because of this. If you had a piece of metal with a density of 11.3 g per mL, it would probably be lead. A similar-looking piece with a density of 2.7 g per mL, however, would probably be aluminum

# Conductor or Insulator?



A conductor allows energy to flow through easily



An insulator does not readily permit energy to flow



# Matter

Properties

Solid

Liquid

Gas

Careers

The air you breath

The water you drink

The chair you sit on

Conductors

and

Insulators

# References:

[go.grolier.com](http://go.grolier.com)