## **Chemistry**

## **Matter:**

States of matter: solids, liquids, gases and plasmas

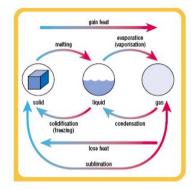
States of matter have been atoms pulled apart/together to make either solids, liquids or gases. Particles to make up a solid are tightly compact. Moving to + from - liquids take up the shape of its container. Gas is particles that have been pushed together and put into a container.

Density = the degree of compactness of a substance, measured in cubic cm's

Viscosity = the state of being thick, sticky, and semi-fluid in consistency, due to internal friction.

Volume = how much room a substance takes up Magnitude = the great size or extent of something.

- Air under pressure supports weight e.g car tyres
- Air under pressure makes an object move
- Air has mass/volume
- Air under pressure makes liquid move



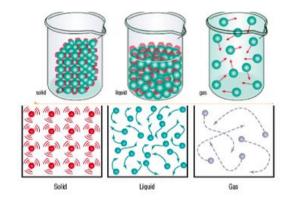
## **Kinetic energy:**

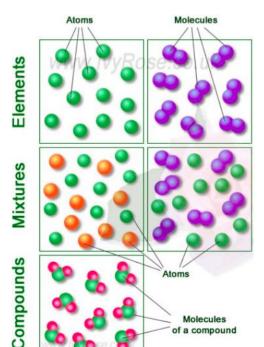
Kinetic energy of an object is the energy that it possesses due to its motion. It is defined as the work needed to accelerate a body of a given mass from rest to its stated velocity. Having gained this energy during its acceleration, the body maintains this kinetic energy unless its speed changes.

## -Atoms:

simplest unit/building block of matter protons, neutrons, electrons many other subatomic particles

Mass = amount of matter an object has





Periodic table = 117 elements

Element - substance made entirely from one type of atom Molecule - two or more atoms chemically joined together e.g chlorine gas or oxygen gas

Compound - substance made up of two or more different elements

All compounds are molecules but not all molecules are compounds.