KS3 | Unit C1 :The particle nature of matter | Year: 7

The 3 states of matter and the particle model		
1	States of matter	the 3 forms that matter can be in: solid, liquid and gas
2	Solids	substances with a fixed shape and volume
3	Liquids	substances with a fixed volume, but no fixed shape
4	Gases	substances that have no fixed shape or volume and are easily compressed
5	Particles	small pieces e.g. atoms or molecules that make a substance
6	Properties	qualities of a substance that can be measured and compared
7	Volume	the amount of space a material takes up
8	Compressed	made smaller by squeezing together
9	Particle model	a representation of how particles behave in solids, liquids and gases
10	Vibration	small backwards and forwards motion
11	Kinetic energy store	the energy store of moving objects
12	Attraction	pulling force between 2 objects
13	Expansion	increase in volume
14	Contraction	decrease in volume
15	Melting	change of state from a solid to a liquid
16	Freezing	change of state from a liquid to a solid
17	Evaporating	change of state from a liquid to a gas
18	Condensing	change of state from a gas to a liquid
19	Sublimation	change of state from a solid to a gas, without the liquid phase
20	Change of state	altering which of the 3 states of matter that a material is in
21	Cooling	energy is transferred out of a material, resulting in a lower temperature
22	Heating	energy is transferred into a material, resulting in a rise of temperature
23	Diffusion	the movement of particles from a place where they are in high concentration to a low concentration
24	Gaseous	in the form of a gas
25	Brownian motion	the random movement of particles in liquids and gases

Mixtures		
26	Mixture	different substances combined physically but not chemically
27	Pure	containing the particles of only one substance
28	Dissolve	combine a solid with a liquid to form a solution
29	Soluble	a solid substance that will dissolve in a liquid
30	Solution	liquid containing dissolved solid (solute + solvent)
31	Solute	solid that dissolves in a liquid to form a solution
32	Solvent	liquid in which a solid is dissolved to form a solution
33	Saturated solution	a liquid that contains as much dissolved solid as it possibly can
34	Insoluble	solid that will not dissolve
35	Separate	remove a substance from a mixture
36	Filtration	process of separating insoluble solids from liquids, by passing the solution through filter paper
37	Filter funnel	a piece of scientific apparatus used during filtration
38	Filtrate	the liquid that passes through the filter when filtration is carried out
39	Residue	the solid left in the filter when filtration is carried out
40	Chromatography	process used to separate (coloured) dissolved solids
41	Chromatogram	pattern of colours left on the piece of paper when chromatography is carried out
42	Distillation	separating a liquid from a solution by evaporating the liquid and then condensing it
43	Boiling point	when a liquid is as hot as it can get before turning into a gas
Density in liquids		
44	Mass	the amount of matter in an object, measured in g and kg
45	Density	measure of the concentration of mass of an object. Calculated using density = mass/volume
46	Particle Model Diagrams