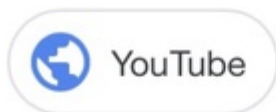


0. Grade 8 Science

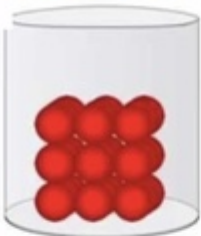
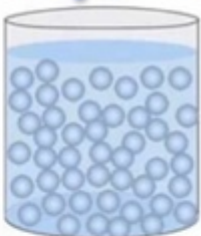
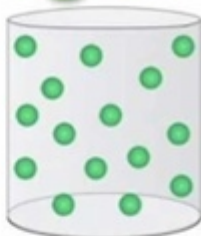









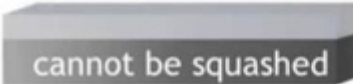
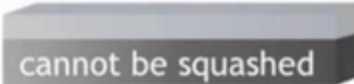
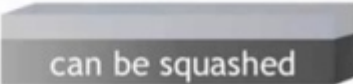
1.1

Three states of matter in terms of the arrangement, movement and energy of the particles

- Gas - spread out, most energy in particles moving freely
- Liquid - close particles, medium energy with particles moving freely
- Solid - particles packed with very little energy

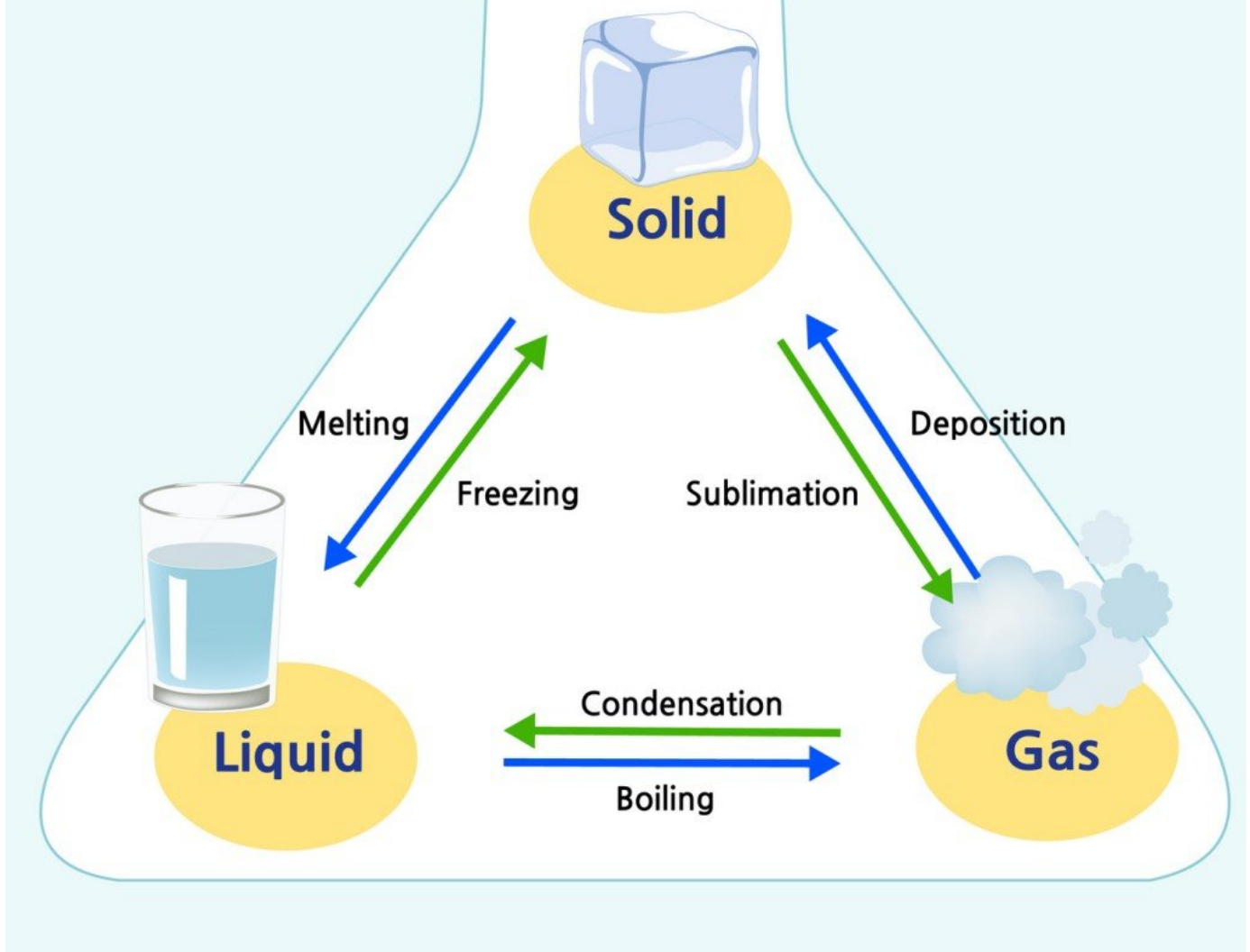


States of Matter - solids, liquids and gases | Chemistry for All | The Fuse .

solid	liquid	gas
		
 rigid	 not rigid	 not rigid
 fixed shape	 no fixed shape	 no fixed shape
 fixed volume	 fixed volume	 no fixed volume
 cannot be squashed	 cannot be squashed	 can be squashed

1.2

Changes of States



1.3

Dilution of color occurs due to diffusion. In fluids, diffusion occurs from a higher to lower concentration of a substance.

1.4 where black is beautiful, black culture should be studied and the cultural awareness of the importance of their own identity.

Def

- solvent - capable of dissolving another substance, most of the time water
- solute - A substance dissolved in another substance

- solution - homogeneous mixture of two or more substances
- saturated solution - solution in which the maximum amount of solvent has been dissolved

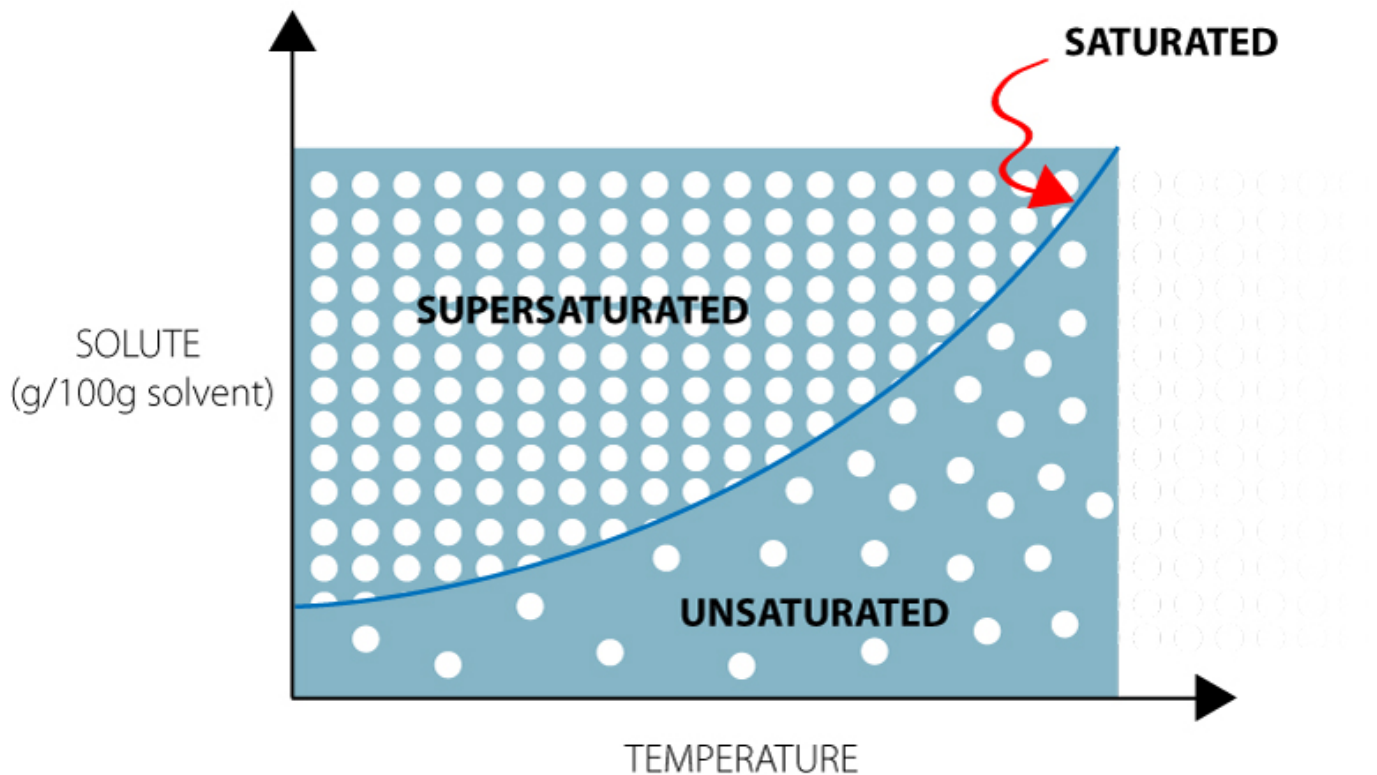
1.5

Solubility is measured in grams per 100 grams of solvent

1.6

SOLUBILITY CURVE

A SOLUBILITY CHART IS USEFUL FOR DETERMINING THE AMOUNT OF SOLUTE IN SOLVENT AT A GIVEN TEMPERATURE



SATURATION

NO MORE CAN DISSOLVE

SURFGUPPY.COM

1.7

Solubility of a solid in water at a specific temperature can be measured by figuring out when the substance starts to not dissolve and stay as a solid.

- Compound - substance that contains atoms of two or more elements combined together chemically
- Mixtures - different from compounds as the different substances are not combined together chemically
- Molecule - smallest particle that can have a separate, independent existence
- Molecular formula - shows the number of atoms of different elements
- Relative formula mass (M_r) - sum of the average atomic masses of the atoms in the formula of a compound
 - work out how many atoms of each element are in the chemical formula
 - add together the A_r values for all the atoms of each element
- Relative atomic mass (A_r) - relative mass of its atoms compared to the mass of a carbon-12 atom