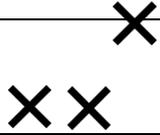
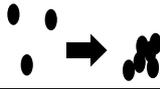
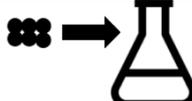
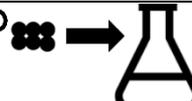
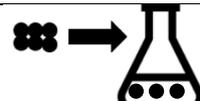
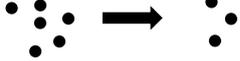
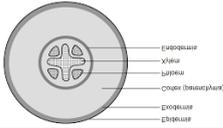
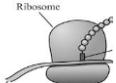


## Year 7 Keywords – Tier 3

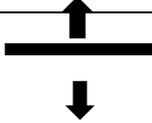
### 7CP Particles

<b>Anomalies</b>	Results that do not fit into the overall trend	
<b>Chromatography</b>	A method of separating more than one solute from a solution – e.g, colours in food dyes	
<b>Compress</b>	To squash into a smaller space	
<b>Condense</b>	When gases cool enough to turn back into a liquid	
<b>Diffusion</b>	The spreading out of particles from an area of high concentration to an area of lower concentration	
<b>Distillation</b>	Method of separation involving evaporating and then condensing	
<b>Evaporate</b>	When particles gain enough energy to turn from a liquid to a gas	
<b>Filtering</b>	Method of separating insoluble particles from a liquid	
<b>Insoluble</b>	A solid that will not dissolve in a solvent	
<b>Reproducible</b>	Results or conclusions that are the same as other groups'	
<b>Saturated</b>	When no more solute will dissolve in a solution	
<b>Soluble</b>	A solid that will dissolve in a solvent	
<b>Solubility</b>	A measure of how much solute can dissolve in a solvent	
<b>Solute</b>	A substance that has dissolved in a solution	
<b>Solution</b>	A solvent plus a solute	
<b>Solvent</b>	The liquid into which something will dissolve	

## 7BC Cells

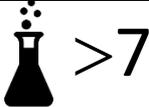
<b>Alveoli</b>	Tiny air sacs in the lungs where oxygen and carbon dioxide diffuse into and out of the blood	
<b>Chloroplast</b>	Where photosynthesis takes place in plant cells	
<b>Cytoplasm</b>	Where the cell's chemical reactions take place	
<b>Diffusion</b>	The random movement of particles from a high concentration to a low concentration across the cell membrane	
<b>Digestion</b>	Breaking down large food molecules into smaller molecules that can be absorbed	
<b>Microscope</b>	The instrument we use to make things appear bigger so that we can see them	
<b>Mitochondria</b>	Where energy is released during respiration	
<b>Nucleus</b>	Controls activities of the cell, where the genetic information is found	
<b>Phloem</b>	Plant tissue that carries dissolved sugars from the leaves around the plant	
<b>Photosynthesis</b>	The chemical reaction in which plants use carbon dioxide and water to make glucose and oxygen using energy	
<b>Respiration</b>	Takes place in all living cells. Glucose broken down to release energy	
<b>Ribosomes</b>	Where proteins are made in a cell	
<b>Tissue</b>	The structure formed when cells with the same type work together	
<b>Vacuole</b>	Where the cell sap is in plant cells	

## 7PF Forces and Motion

<b>Acceleration</b>	When an object speeds up	
<b>Air resistance</b>	The force acting against an object moving through the air	
<b>Friction</b>	Contact force when two objects rub against each other	
<b>Gravitational field</b>	The non-contact force pulling on each kg of mass of an object	
<b>Lift</b>	The force acting upwards on an object in air	
<b>Magnetic force</b>	A non-contact force that pulls an object towards a magnet	
<b>Mass</b>	How much matter/ particles an object is made up of	
<b>Normal contact</b>	The force acting upwards on object on a solid surface	
<b>Pressure</b>	How spread out a force is over a certain area	
<b>Relative motion</b>	How the speed of an object appears to an observer, depending on the observer's velocity	
<b>Resultant force</b>	The difference between forces acting in opposite directions	
<b>Speed</b>	The distance travelled in a given time	
<b>Tension</b>	The force acting against the stretch in a string or rope	
<b>Thrust</b>	The force that tries to make an object move	
<b>Upthrust</b>	The force acting upwards on an object in water	
<b>Velocity</b>	Speed in a given direction	

<b>Water resistance</b>	The force acting against an object moving through water	
<b>Weight</b>	The force of gravity pulling on every kg of mass	

## 7CC Chemical Reactions

Acid	A chemical that has a pH of below 7	
Alkali	A soluble base with a pH above 7	
Base	Any chemical that can neutralise an acid	
Burette	Piece of equipment used to add acid or alkali drop by drop	
Concentration	How many particles there are per cm <sup>3</sup> there are in a solution	
Combustion	Burning of a fuel in oxygen	
Corrosive	Any substance that can eat through materials	
Hazard	Any substance or item that could be dangerous	
Hypothesis	A statement that can be tested scientifically	
Indicator	A chemical that changes colour in acids, alkalis or neutral solutions	
Neutralisation	When acids and bases react together to produce a neutral solution	7
Oxidation	A reaction in which a substance joins with oxygen	+O <sub>2</sub>
Repeatable	When repeated readings are taken by the same group and results are very similar	
Universal indicator	Indicator with a range of colours, each of which indicates a position on the pH scale	

## 7PE Energy

<b>Absorb</b>	To take in – e.g as objects absorb heat energy	
<b>Conduction</b>	Energy transfer from particle to particle by contact	
<b>Convection</b>	Energy transfer by rising hot liquids or gases due to differences in density	
<b>Density</b>	How heavy an object is for its size – often determined by how closely packed the particles are	
<b>Efficiency</b>	How good a device is at transferring energy usefully	
<b>Emit</b>	Give out – as in emit heat.	
<b>Energy</b>	The ability to do work	
<b>Fluid</b>	A substance which can flow (all gases and liquids)	
<b>Fuel</b>	A substance that releases energy when burned	
<b>Insulator</b>	A material that does not conduct heat well	
<b>Power</b>	How quickly energy is transferred by a device	
<b>Radiation</b>	Heat transfer by a wave	
<b>Renewable</b>	A substance or energy resource that can be replaced and will not run out.	

## 7BR Reproduction

<b>Chromosomes</b>	Structures inside the nucleus that contain genetic instructions	
<b>Embryo</b>	The ball of dividing cells that forms in the first few weeks after fertilisation.	
<b>Fertilisation</b>	The joining together of the nucleus of sperm/pollen and an egg cell	
<b>Gamete</b>	Sex cells e.g. sperm, eggs	
<b>Menstruation</b>	The lining of the uterus breaks down and is passed out of the vagina. Also known as a period	
<b>Ovulation</b>	When an egg is released from the ovary	
<b>Pollination</b>	Movement of pollen from the anther to the stigma	
<b>Placenta</b>	Organ that provides the foetus with nutrients and oxygen and removes waste substances	
<b>Puberty</b>	The changes boys and girls go through as they grow into adults	
<b>Sexual reproduction</b>	Reproduction involving 2 parents, each of whom provides half the genetic information for the offspring	
<b>Species</b>	Group of organisms that can breed together to produce fertile offspring	
<b>Testis</b>	Where the sperm cells are made (plural testes)	
<b>Umbilical cord</b>	Structure that connects the baby to the placenta through which the baby receives nutrients	
<b>Uterus</b>	Also known as the womb, this is where a fertilised egg can implant and grow into a baby	
<b>Variation</b>	Differences between organisms of the same species	

## Tier 2 Words

Hypothesis	An explanation that you can test through study and experimentation	
Independent variable	The variable in an experiment that is changed by the investigator	
Dependent Variable	The variable in an experiment that is measured (for every and each change in the independent variable)	
Control Variable	A variable that could affect the outcome of an investigation if not kept at a constant. A variable that stays the same though the experiment	
Resolution - of a measuring instrument	The smallest change in the quantity that gives a change in the reading. (A thermometer with a mark every 1°C has a resolution of 1°C)	
Resolution – of a microscope	How much detail of the image a microscope shows	
Variation	The differences between individuals of a species. It can be inherited or environmental	
Continuous data	Data that can be measured numerically and falls within a range (height, finger length etc)	
Categoric data	Variables that have values that have labels (names, types of shoes, etc)	
Reproduction	The production of offspring by sexual or asexual processes	
Adaptation (of a cell)	A structure that enables a cell to perform a function (e.g. a sperm cell has a tail for swimming to the egg)	
Modelling	A representation of an idea, object or process that is hard to see normally	
Transfer	The conversion of one form of energy to another	
Appliance	A piece of equipment designed to do a specific task (e.g a washing machine washes clothes)	

Reproducible (results)	A measurement that is taken that gives the same value when the experiment is done again by a different person or using different techniques	
Conservation	The prevention of a wasteful use of a resource	
Function	What something does or what it is used for	
Renewable	An energy source that is not depleted (used up) when used	
Appliance	A piece of equipment designed to do a specific task (e.g a washing machine washes clothes)	
Reproducible (results)	A measurement that is taken that gives the same value when the experiment is done again by a different person or using different techniques	