Key Stage 3 Science -Year 8 Useful links

Arbor Column	Topic	Bitesize links	Flipped Learning links
8.01	B8.01 Digestion	Nutrition, digestion and excretion - KS3 Biology - BBC Bitesize	Scientific Eye Diet & Nutrition S111LS02
8.02	B8.02 Breathing & Respiration	Respiration and gas exchange - KS3 Biology - BBC Bitesize	Science in Action Respiration S108LS17
	B8.03 Evolution	Natural selection leads to evolution - Inheritance and genetics - KS3 Biology - BBC Bitesize	Scientific Eye Habitat & Population S111LS04
8.03	B8.04 Inheritance	Inheritance and genetics - KS3 Biology - BBC Bitesize	New GCSE BBC Bitesize - Inheritance
8.04	B8.05 Plants & Climate	KS3 Biology - BBC Bitesize	Scientific Eye Green Plants S111LS03
8.05	C8.01 Periodic Table	Periodic table - KS3 Chemistry - BBC Bitesize	GCSE BBC Science Bitesize - The Periodic Table
8.06	C8.02 Elements, compounds, mixtures	Elements, compounds and mixtures - BBC Bitesize	Sci Eye Elements S098LS75
8.07	C8.03 Metals & Non-Metals	Periodic table - KS3 Chemistry - BBC Bitesize What are metals and non-metals on the periodic table? - BBC Bitesize	Sci Eye Metals B27LS37
	C8.04 Types of Chemical Reactions	Periodic table - KS3 Chemistry - BBC Bitesize Chemical reactions - KS3 Chemistry - BBC Bitesize	Sci Eye Chemical Reactions G26LS30
8.08	P8.01 Heating & Cooling	Heating and cooling - Energy - KS3 Physics - BBC Bitesize	Scientific Eye Temperature & Heat S102LS09
8.09	P8.02 Magnets & Electromagnets	Electromagnetism and magnetism - KS3 Physics - BBC Bitesize	Sci Eye Electricity and Magnetism G53LS56
8.10	P8.03 Pressure & Levers	Pressure guide for KS3 physics students - BBC Bitesize	Sci Eye Machines and Moments S102LS06
8.11	P8.04 Light	Light Waves - BBC Bitesize Physics - KS3 Science - BBC Bitesize	Scientific Eye Light & Reflection S102LS47
8.12	P8.05 Sound	Introduction to sound waves guide for KS3 physics students - BBC Bitesize	Sci Eye Hearing and Sound G45LS24

Year 8 Biology Commonly Misspelt Words

Key Word	Definition
Allele	Different versions of genes
Atmosphere	Gasses surrounding the earth
Chlorophyll	A green pigment which absorbs light energy
Chromosome	Structures made of DNA, found in the nucleus
Community	All of the populations of different species in an ecosystem.
Gametes	Sex cells e.g. sperm, egg, pollen
Genotype	The alleles present that determines characteristics
Hereditary	Information passed down from parents
Heterozygous	If the two alleles are different
Homozygous	If two alleles are the same
Interdependence	Within a community each species depends on each other for food, shelter, pollination, seed dispersal etc.
Meiosis	The process of cell division to create gametes
Mitochondria	An organelle found in animal and plant cells. Aerobic Respiration takes place here.
Oesophagus	Muscular tube delivering food from mouth to stomach
Palisade cell	A specialised cell adapted for photosynthesis found in the leaf
Pancreas	Produces digestive juices
Phenotype	The physical characteristic that is expressed as a result of genes
Photosynthesis	Process by which plants use sunlight to make glucose
Recessive	An allele that is only expressed if two copies are present
Stomach	Contains Hydrochloric acid and breaks down food

Year 8 Chemistry Commonly Misspelt Words

Key Word	Definition
Alloy	A metal with one or more other elements added to it to improve its properties.
Combustion	Burning usually air. The reaction gives out energy, which is transferred to the surroundings by heating or light.
Compound	A substance that can be split up into simpler substance, since it contains the atoms of two or more different elements joined together
Chemical reaction	The change in which one or more new substances are formed.
Corrosion	When something, such as a stone or metal, reacts with chemicals in the air or water and gets worn away.
Diffusion	When particles spread and mix with each other without anything moving them.
Effervescence	The production of gas in a reaction occurring in a liquid.
Element	A simple substance, made-up of only one type of atom.
Formulae	Combination of symbols and numbers that show how many atoms of different kinds are in a particular molecule. In compounds that do not form molecules it shows the ratio of elements in the compound.
Hydrocarbon	A compound made-up of only hydrogen and carbon atoms
Law of conservation of mass	The idea that mass is not lost or gained during a chemical reaction. The mass of all the reactants is equal to the mass of all the products.
Matter	Things are made of matter. There are three states of matter solid, liquid, gas.

Metal oxide	A metal that has combined with oxygen in a chemical reaction. E.g. Magnesium oxide.
Molecule	Two or more atoms joined together in a group of a set size.
Oxidation	Reacting with oxygen. For example, when a fuel combusts or when a metal reacts with oxygen to form a metal oxide.
Physical property	A description of how a material behaves unresponsive to forces and energy. Hardness is a physical property.
Reactant	A substance that takes part in a chemical reaction. Reactants are written on the left side, before the arrow, in a word equation.
Reactivity	A description of how quickly or vigorously something reacts.
Temperature	How hot something is, usually measured in degrees Celsius.
Thermometer	A device used to measure temperature

Year 8 Physics Commonly Misspelt Words

Key Word	**Definition**
Cochlea	Fluid filled, spiral cavity found in the inner ear
Conduction	How heat energy is transferred through solids
Convection	How heat energy is transferred through liquids and gases
Cornea	The clear outer layer of the eye used to help focus light (not the lens)
Cyan	A colour formed of blue and green light
Electromagnet	A type of magnet formed through coils of current carrying wire
Evaporation	The change of state that occurs when a liquid becomes a gas
Insulation	Material used to reduce the transfer of heat energy
Iris	Coloured structure that controls how much light enters the eye
Lever	A device used as a force multiplier designed for lifting or moving heavy objects
Longitudinal	A type of wave where the vibration of the particles is parallel to the direction of the wave
Majenta	A colour formed of red and blue light
Opaque	Light cannot pass through this object
Pressure	Force applied over an area
Radiation	How heat energy is transferred as a wave
Reflection	When a wave hits a surface and returns
Refraction	When a wave travels through a medium and is slowed down
Retina	The place in the eye where light receptors are found
Transmit	Send a signal
Transverse	A type of wave where the vibration of the particles is perpendicular (90°) to the direction of the wave