

## GCSE Sciences. Exam Board: Edexcel

## 30 Key Words

Biology		Chemistry		Physics	
Diffusion	Spreading of particles from an area of high concentration to an area of low concentration	Aqueous	A mixture of a substance dissolved in water. Given the state symbol aq	Acceleration	How quickly the velocity of an object changes (= change in speed ÷ time)
Glucagon	A hormone that triggers the breakdown of glycogen in the liver into glucose, increasing blood glucose concentration	Base	A substance that will react with an acid to form a salt and water	Induced Magnet	A piece of material that becomes a magnet because it is in the magnetic field of another magnet
Glycogen	A long chain molecule (polymer) made of glucose units. Glucose is converted to glycogen and stored in the liver when blood glucose concentrations are too high.	Corrosion	A reaction of a metal with water and oxygen - often weakens a metal	Potential Difference	Another term for voltage. The difference in energy carried by electrons before and after travelling through a component
Heterozygous	When both alleles (versions) for a gene are different	Dynamic Equilibrium	A reversible reaction in which the forward reaction happens at the same rate as the backwards reaction	Radioactive Decay	When an unstable nucleus emits ionising radiation (alpha, beta or positron) to become more stable
Homozygous	When both alleles (versions) for a gene are the same	Empirical Formulae	The simplest whole number ratio of atoms in a compound - eg P <sub>4</sub> O <sub>10</sub> has an empirical formula P <sub>2</sub> O <sub>5</sub>	Resistance	How difficult it is for electricity to flow through a circuit. Measured in ohms.
Meiosis	The process of a cell division to make 4 genetically non-identical daughter cells with half the number of chromosomes (haploid)	Oxidation	A reaction with oxygen or a reaction involving a loss of electrons	Resultant Force	The total force that results from 2 or more forces acting on an object
Mitochondria	A structure within a cell where aerobic respiration takes place and energy is released	Precipitation	A reaction in which 2 substances dissolved in water produce new substances, one of which is insoluble	Scalar	A quantity that has size but no direction - eg mass, distance, energy and speed
Mitosis	The process of a cell division to make 2 genetically identical cells with a full set of chromosomes (diploid)	Reduction	A reaction used to extract a metal or a reaction involving a gain of electrons	Specific Heat Capacity	The energy needed to raise the temperature of 1kg of a material by 1°C, without changing state
Osmosis	The diffusion of water from an area of high water concentration to an area of low water concentration across a partially permeable membrane	Solute	A substance that is able to dissolve in a liquid to make a solution	Vector	A quantity that has both size and direction - eg a force, velocity, displacement and acceleration
Ribosomes	A structure within a cell used in the production of proteins	Solution	Produced when a substance dissolves in water - eg a salt solution	Work done	How much energy is transferred when a force acts through a distance