Science Explanation Keywords

	Yr7 Emerging	Yr7 Developing	Yr7 Securing Yr8 Emerging	Yr7 Mastering Yr8 Developing	Yr8 Securing	Yr8 Mastering
FORCES	(Changes to) Shape (Changes to) Speed (Changes to) Direction Rubbing ---------> Newton	Drag Air Resistance Thrust Up thrust Weight (due to gravity) Friction / Grip Tension Compression Reaction Magnetic	Greater than Less than Balanced Unbalanced Resultant force Acceleration Deceleration Pressure Apply ------------> Attract / Repel	Shear Constant Speed Exert Electrostatic	Momentum Average Speed	Rate of Change of … Instantaneous Speed
Particles	(made of) stuff ->	Matter Mixture Mass	Magnetic Dissolve Solution	Domain Soluble Insoluble	**Diffusion** Saturated	Aqueous
	For Physical changes					
	State (of Matter)	Pattern ----------> Movement ------> Solid Liquid Gas Boiling (Point) Melting (Point) Temperature	Lattice Vibration Crystallise Arrangement State Freezing Condensing Evaporating Bond	Gel Foam Aerosol Conduction Convection Radiation Insulator Density Electrons	Emulsion Suspension ----> **Surface Area**	Colloid Sol Secondary bond Free Electrons
	For Chemical changes					
	Chemical Reaction	Rearranged Substance Element Mixture Compound	Bond Collision / Collides Atom Molecule Reactants Products Displacement	Exothermic Endothermic Oxidation Reduction Rate Reactivity	Ionic Covalent **Surface Area** Frequency	'Activation energy'
ENERGY	(Changes to) Temperature Heat ------------> Movement ----->	Electrical Sound Thermal Light Kinetic Nuclear Potential Chemical Potential Gravitational Potential Elastic Potential Burning ---------->	Source … transforms into … … transfers to … Waste Ignited Stored Combustion	Conduction Convection Radiation Insulator Exothermic Endothermic	**Surface Area** Infra-red Work Power Catalyst Efficiency	'Activation energy'
CELLS	Living Organism Grow ----------->	Plant Animal Shape White Blood Cell Red Blood Cell Muscle Skin --------------> Sperm Egg ---------------> Guard Palisade Wall Divide ----------->	Yeast Bacteria Specialised Tissue Organ Organ System Cilia Epithelial Ovum Stomata Nucleus Chloroplasts Vacuole Membrane Cytoplasm Ribosome Mitochondria Multiply ---------->	Agar Adaptation Function Unicellular Multicellular Platelet Chlorophyll Protein Respiration --------------------->	**Surface Area** Interdependence **Diffusion** Mitosis	'Zone of Inhibition' Synthesis Meiosis