YEAR 8 CURRICULUM SUMMARY





Science Curriculum Summary



When?	Knowledge	Understanding	Assessment
Topic 1 B/C/P	Will be able to:	Students will carry out a range of practical experiments during these topics.	
	 B2 Ch1 Health and Lifestyle describe the differences between a healthy and unhealthy diet, including the effect of drugs and alcohol. carry out food tests. describe the components and function of the digestion system. 	B2 Ch1 Health and Lifestyle key vocabulary: alcoholic balanced diet carbohydrate catalyst deficiency digestion enzyme food test hypothesis large intestine malnourishment passive smoking protease protein small intestine starvation	B2 Ch1 test (40 marks) C2 Ch1 test (40 marks) P2 Ch1 test (40 marks)
	 C2 Ch1 The periodic table describe the differences between metals and non – metals understand the term groups and periods describe the properties in group 0, 1 and 7. 	C2 Ch1 The periodic table key vocabulary: displacement reaction Group 0 Group 1 Group 7 halogen metal noble gases	



When?	Knowledge	Understanding	Assessment
	 P2 Ch1 Electricity and magnetism describe the differences between a series and parallel circuit and explain the components of a circuit. Describe the differences between a magnet and electromagnet and explain what is happening. 	non-metal period physical property reactive unreactive P2 Ch1 Electricity and magnetism key vocabulary: ammeter electric charge electrical field electromagnet insulator magnetic field motor negative neutral potential difference proton relay repel resistance switch voltmeter	
	Will be able to:	Students will carry out a range of practical experiments during these topics.	
B2Ch3 C2Ch2 P2Ch2	 B2 Ch3 Adaptation and inheritance describe competition and adaptation in animals. describe the inheritance of traits in animals. 	B2 Ch3 Adaptation and inheritance key vocabulary: adaptation chromosome competition continuous variation	B2 Ch3 test (40 marks) C2 Ch2 test (40 marks) P2 Ch2 test (40 marks)



When?	Knowledge	Understanding	Assessment
	describe evolution and extinction in animals.	discontinuous variation DNA evolution extinct fossil gene gene bank interdependence natural selection species variation	
	 C2 Ch2 Separation techniques describe the term mixtures and solutions. determine which separation technique would be used to separate different substances and be able to describe how they are carried out. 	C2 Ch2 Separation techniques key vocabulary: chromatography distillation filtration impure insoluble mixture pure saturated solution solubility solution solvent	
	P2 Ch2 Energy	P2 Ch2 Energy key vocabulary:	
	 define energy and describe how it is different from temperature. describe how energy is transferred through convection and conduction. describe the difference 	chemical store conduction convection energy energy resources equilibrium gravitational potential store infrared radiation	
	between renewable and non-	infrared radiation insulator	



When?	Knowledge	Understanding	Assessment
	renewable resources. link energy, work and power. 	kilojoules law of conservation of energy non-renewable power rating radiation renewable temperature thermometer	
B2 Ch2 C2 Ch3 P2 Ch3	 Will be able to: B2 Ch2 Ecosystems describe the key biological and chemical processes in plants describe food webs and chains and how they can be disrupted. 	Students will carry out a range of practical experiments during these topics. B2 Ch2 Ecosystems key vocabulary: aerobic respiration anaerobic respiration chemosynthesis consumer deficiency ecosystem fermentation fertiliser food chain food web habitat interdependence photosynthesis predator prey	B2 Ch2 test (40 marks) C2 Ch3 test (40 marks) P2 Ch3 test (40 marks)
	 C2 Ch3 Metals and acids describe and explain the reactions of metals and other substances. describe the composition of different materials. 	C2 Ch3 Metals and acids key vocabulary: composite displace displacement reaction metal natural polymer	



When?	Knowledge	Understanding	Assessment
When?	 P2 Ch 3 Motion and pressure calculate speed using equations be able to draw and explain motion graphs describe the pressure in solids, liquids and gases. explain and calculate turning 	 polymer reactivity series state symbol thermite reaction P2 Ch 3 Motion and pressure key vocabulary: acceleration centre of gravity centre of mass distance-time graph gas pressure instantaneous speed 	Assessment
	forces.	law of moments moment pivot pressure relative motion speed	
C2 Ch4		Students will carry out a range of practical experiments during these topics.	C2 Ch4 test (40 marks)
	 C2 Ch4 the Earth Will be able to: describe the formation of different rock types. Describe climate change and explain the importance of recycling 	C2 Ch4 the Earth key vocabulary: atmosphere biological weathering carbon cycle climate change combustion	



When?	Knowledge	Understanding	Assessment
When?	Knowledge	Understanding deforestation deposition erosion global warming greenhouse effect greenhouse gas igneous physical weathering recycling respiration	Assessment
		rock cycle sediment weathering	