## S Birchwood High School

## Science (Chemistry/Biology/Physics) Curriculum Map 2022/2023

Topics are taught on a rotation basis, each class will cover all of the content below but may be studying it at different points in the year.

	Throughout the year the following topics are covered				
7	Topic: B1 Cells	Topic: C1 Particles	Topic: P2 Sound	Topic: C3 Reactions	Topic: B3 Reproduction
	Observing plant and animal cells Specialised cells and the movement of substances Unicellular organisms	Particles and states of matter Changes of state Diffusion and gas pressure	Sound and energy transfer (waves) Loudness, pitch, echoes & ultrasound Detecting sound	Chemical reactions and their word equations Combustion, decomposition and conservation of mass Endothermic and exothermic reactions	Adolescence, reproduct & implantation The menstrual cycle and of a foetus Plant reproduction
	<b>Topic: P1 Forces</b> Squashing and stretching Drag and friction Balanced and unbalanced forces	Topic: C2 Elements, atoms and compounds Elements, atoms and compound Chemical formula	Topic: B2 Body systems Levels of organisation Breathing and gas exchange Human anatomy (muscles and skeleton)	Topic: C4 Acids and alkalis Acids and alkalis Indicators, pH and neutralisation Making salt	Topic: P3 Light Light, reflection, refract The eye and the camera
8	Topic: B1 Health and lifestyle Testing food for nutrients Healthy and unhealthy diets	Topic: C1 periodic table Differences between metals and non- metals	Topic: B2 Ecosystems processes Photosynthesis, Leaves and plant minerals	<b>Topic:</b> C3 Metals and acids Reactions of metals with acid, oxygen and water	Topic: B3 Adaptations a Competition and adapta animals
	Bacteria and enzymes in digestion Drugs ,alcohol and smoking	Differences between groups and periods Elements of groups 1,7and 0	Chemosynthesis in bacteria Aerobic and anaerobic respiration in humans and microorganisms	Displacement reactions between metals Extracting metals using the reactivity	Adaptations and variation Continuous and discont and results
	Topic: P1 Electricity and magnetism Positive and negative charges Electrical circuits and current, potential	<b><u>Topic</u>: C2 Separation Techniques</b> Solubility within mixtures and solutions	Food chains and webs in ecosystems with disruptions Topic: P2 Energy	series Properties of ceramics, polymers and composites	Inheritance and natural animals Extinctions and how the
	difference and resistance Series and parallel circuits	Techniques such as filtration, evaporation, distillation and	Food and fuels	Topic: C4 The Earth	Topic: P3 Motion and p
	Magnets, magnetic fields and creating electromagnets	chromatography.	Differences between energy and temperature Transferring energy using particles and radiation Power and work from energy	The earth and its atmosphere Properties of sedimentary, igneous and metamorphic rocks with their cycles Carbon cycle and climate change Advantages and disadvantages of recycling	Speed calculations Understanding motion g Pressure with solids, liqu Moments of forces

your dreams, your future, our challenge

ion	Topic: P4 Space
uction, fertilisation	The Earth and the Solar System. The night sky and the Moon.
and development	
	Constant topic throughout the year:
	Working scientifically Asking scientific question
	Planning investigations
action & colour	Recording, analysing and evaluating data
era	
ns and inheritance	Constant topic throughout the year:
ptation within	Working scientifically Asking scientific question
ation in animals	Planning investigations
ontinuous graphing	Recording, analysing and evaluating data
ral selection of	
they occur	End of key stage assessment
d pressure	
on graphs liquids and gases	