



Year 8 Curriculum Grid

KS3 Science

Year/Term	Unit	Intent
Curriculum purpose		<ul style="list-style-type: none"> Ensure students have a secure understanding of the 10 key topics Engage students in Science building on knowledge from Key Stage 2 and Year 7 ensuring a deeper understanding of the key concepts of the three subject disciplines of Biology, Chemistry and Physics. Encourage students to carry out practical work safely with increasing independent skills.
Autumn	B1 Health and lifestyle	<ul style="list-style-type: none"> Explain the purpose of the group in keeping the body healthy Evaluate the impact of lifestyle choices on health including drug, smoking and alcohol, linking to impacts on fertility and pregnancy
	C1 Periodic table	<ul style="list-style-type: none"> Describe the properties of elements in group 1, group 7 and group 0 on the periodic table Compare the patterns in properties of groups in the periodic table
	P1 Electricity and Magnetism	<ul style="list-style-type: none"> Investigate current, potential difference and resistance in series and parallel circuits Investigate the strength of electromagnets, and explain practical uses
	Start B2, C2. P2 C3	
Spring	B2 Ecosystem processes	<ul style="list-style-type: none"> Describe the processes of photosynthesis, chemosynthesis, aerobic and anaerobic respiration Explain the link between food chains and food webs in an ecosystem
	C2 Separation Techniques	<ul style="list-style-type: none"> Describe mixtures and the formation of solutions Describe and demonstrate methods of separating mixtures including, filtration, evaporation, distillation and chromatography
	P2 Energy	<ul style="list-style-type: none"> Describe different energy transfers including conduction and convection in particles and radiation Investigate our energy resources, renewable and non-renewable
	C3 Metal and acids	<ul style="list-style-type: none"> Investigate reactions between metals with acids, oxygen and water Evaluate the properties of ceramics, polymers and composites
	Start B3, C4, P3	
Summer	B3 Adaptations and inheritance,	<ul style="list-style-type: none"> Describe competition and adaptations within a community Describe inheritance as the cause of variation
	C4 The Earth	<ul style="list-style-type: none"> Describe the structure of the earth and formation of rocks Describe the carbon cycle and climate change
	P3 Motion and Pressure	<ul style="list-style-type: none"> Demonstrate the calculation of speed using given data and data from a motion graph Explain turning forces
	Investigation skills	<ul style="list-style-type: none"> Demonstrate skills in investigation planning, Analyse, draw conclusions and evaluate data from investigation techniques