



Year 7 Curriculum Grid

KS3 Science

Year/Term	Unit	Intent
Curriculum purpose		<ul style="list-style-type: none"> Ensure students have a secure understanding of the 11 key topics Engage students in Science building on knowledge from Key Stage 2, 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	Introduction to science	<ul style="list-style-type: none"> Recognise methods of working safely with the science lab Introduce practical skills needed within science including drawing graphs and analysing data
	B1 Cells	<ul style="list-style-type: none"> Identify plant and animal cells including specialised cells and unicellular organisms Describe the basic movement of substances into and out of cells
	C1 Particles and their behaviour	<ul style="list-style-type: none"> Compare the structure and properties of the states of matter, including changes of state Explain the behaviour of particles in diffusion and gas pressure
	P1 Forces	<ul style="list-style-type: none"> Identify contact and non-contact forces as balanced or unbalanced Describe the effect of different forces on everyday objects, including gravity
	Start B2, C2 P2 C3	
Spring	B2 Structure and function of body systems	<ul style="list-style-type: none"> Describe how multicellular organisms are composed of organ systems, organs and cells Explain the process of gas exchange and breathing in the respiratory system, and movement in the skeletal system
	C2 Elements, atoms and compounds	<ul style="list-style-type: none"> Describe atoms, elements and compounds, using formulae Explain the formation of compounds by joining elements
	P2 sound	<ul style="list-style-type: none"> Describe the production of sound and how the ear works Discuss the sound in terms of frequency, pitch, and amplitude
	C3 Reactions	<ul style="list-style-type: none"> Use simple word equations for burning and thermal decomposition Classify changes as exothermic and endothermic reactions
	Start B3, C4, P3, P4	
Summer	B3 Reproduction	<ul style="list-style-type: none"> Describe and explain the process of reproduction in plants Describe and explain the process of reproduction in humans
	C4 Acids and alkalis	<ul style="list-style-type: none"> Recognise acids and alkalis from properties and using indicators Investigate neutralisation reactions
	P3 Light	<ul style="list-style-type: none"> Describe the process of reflection and refraction of light Explain how filters and coloured materials affect the colour seen
	P4 Space	<ul style="list-style-type: none"> Identify objects seen in the night sky and the solar system Explain why day, night seasons and years happen
	Investigation skills	<ul style="list-style-type: none"> Demonstrate skills in investigation planning, Analyse, draw conclusions and evaluate data from investigation techniques