

# Year 9 – GCSE SCIENCE Programme of Study

Term	Autumn		Spring		Summer	
<b>Teacher 1</b>	<b>GCSE Energy</b>		<b>GCSE Particle Model of Matter</b>		<b>GCSE Bonding, Structure &amp; the Properties of Matter</b>	
	Energy - stores, transfers, conservation, dissipation, efficiency; specific heat capacity; energy resources & energy security Required Practical (RP) - Specific Heat Capacity RP - Thermal Insulation (T = Triple only)		States of matter - behaviour & arrangement of particles; internal energy; specific latent heat; specific heat capacity; density; gas laws RP - Density		Bonding - ionic, covalent & metallic; states of matter; properties of compounds, metals & alloys; polymers; carbon; nanoparticles (T)	
<b>Assessment</b>	<b>Half-term 1: Energy Mid-topic Test</b>	<b>Half-term 2: Energy End of Unit Test</b>	<b>Half-term 1: Particle Model Mid-Topic Test</b>	<b>Half-term 2: Particle Model End of Unit Test</b>	<b>Half-term 1: Structure &amp; Bonding Mid-Topic Test</b>	
<b>Teacher 2</b>	<b>GCSE Atomic Structure &amp; Periodic Table</b>		<b>GCSE Cell Biology</b>		<b>GCSE Organisation</b>	
	States of matter; atoms, elements & compounds; balancing equations; separation techniques; models of the atom; atomic structure; isotopes; Periodic Table (groups 1, 7 & 0); metals & non-metals; ions; transition metals; catalysis		Structural differences between different types of cell and how this relates to function; contributions of microscopy to understanding of cells; cell division by mitosis; transport of substances in/out of cells RP - Microscopy RP - Microbiology (T) RP - Osmosis		Role of enzymes in the human digestive system; adaptations of the respiratory system for gas exchange; blood components and structures of the circulatory system; effect of lifestyle choices on health & disease. RP - Enzymes RP - Food tests	
<b>Assessment</b>	<b>Half-term 1: Atomic Structure Mid-Topic Test</b>	<b>Half-term 2: Atomic Structure End of Unit Test</b>	<b>Half-term 1: Cell Biology Mid-Topic Test</b>	<b>Half-term 2: Cell Biology End of Unit Test</b>	<b>Half-term 1: Organisation Mid-Topic Test</b>	<b>End of Year 9 Exam</b>

RP – Required Practical	T – Triple Content Only	H – Higher tier Only	Biology	Chemistry	Physics
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