

Curriculum Overview – Year 7 Science

Unit Title	Learning	How can parents best support?
Safety Project	Students will learn about: <ul style="list-style-type: none"> • Hazards in science • Scientific apparatus • Equipment for measuring. • Using a Bunsen burner safely • Conducting full practical investigations safely. 	Encourage the completion of weekly homework quizzes Engage in scientific discussions Use the knowledge organiser to learn the meanings of essential keywords.
Key Scientific skills	Students will learn about: <ul style="list-style-type: none"> • The units for certain measurements. • Identifying variables. • Designing results tables. • Interpreting graphs. 	Encourage the completion of weekly homework quizzes Engage in scientific discussions Use the knowledge organiser to learn the meanings of essential keywords.
Substance and Properties	Students will learn; <ul style="list-style-type: none"> • The properties of composite materials • How to classify materials based on their properties and melting points 	Encourage the completion of weekly homework quizzes Engage in scientific discussions Use the knowledge organiser to learn the meanings of essential keywords.
Cells, Inheritance and Organ Systems	Students will learn about: <ul style="list-style-type: none"> • Cells and cell structure. • Using microscopes. • Diffusion • Inheritance and DNA • Organisation of the body. • Digestive system • Respiratory system. • Circulatory system • Skeletal and muscle system. 	Encourage the completion of weekly homework quizzes Engage in scientific discussions Use the knowledge organiser to learn the meanings of essential keywords.

	<ul style="list-style-type: none"> • The effects of exercise of the body. 	
Forces and Motion	<p>Students will learn,</p> <ul style="list-style-type: none"> • How to describe forces and how they effect speed, direction and shape. • How to calculate balanced, unbalanced and resultant forces. • To investigate the uses of friction • Energy stores and transfers. • How to use Sankey diagrams to show efficiency. • The cost, use and fuel bills. 	<p>Encourage the completion of weekly homework quizzes</p> <p>Engage in scientific discussions</p> <p>Use the knowledge organiser to learn the meanings of essential keywords.</p>
Sound, Light and Waves	<p>Students will learn about;</p> <ul style="list-style-type: none"> • How sounds are produced • How sound travels through different media • How the ear works, uses of ultrasound and the auditory range of animals • The physical properties of light • How light is reflected and refracted • About the effects of distance on light 	<p>Encourage the completion of weekly homework quizzes</p> <p>Engage in scientific discussions</p> <p>Use the knowledge organiser to learn the meanings of essential keywords.</p>
Variation, Adaptation and Evolution	<p>Students will learn;</p> <ul style="list-style-type: none"> • How the differences in DNA can lead to variation, both continuous and discontinuous • How variations are caused • How fossils are formed and giving an evidence of history 	<p>Encourage the completion of weekly homework quizzes</p> <p>Engage in scientific discussions</p> <p>Use the knowledge organiser to learn the meanings of essential keywords.</p>
Health and Disease	<p>The students will be studying;</p> <ul style="list-style-type: none"> • Good and ill health (factors affecting health and disease) 	<p>Encourage the completion of weekly homework quizzes</p>

	<ul style="list-style-type: none"> • Disease (communicable and non-communicable) • Antibiotics and resistance • Investigating antimicrobials 	<p>Engage in scientific discussions Use the knowledge organiser to learn the meanings of essential keywords.</p>
Designing Materials	<p>Students will learn;</p> <ul style="list-style-type: none"> • That polymers are long chains of repeating units and how their properties change based on their arrangement 	<p>Encourage the completion of weekly homework quizzes Engage in scientific discussions Use the knowledge organiser to learn the meanings of essential keywords.</p>
Solar System and Beyond	<p>Students will learn;</p> <ul style="list-style-type: none"> • The structure of the Earth, solar system and galaxies • That gravity is a force, measured in newtons 	<p>Encourage the completion of weekly homework quizzes Engage in scientific discussions Use the knowledge organiser to learn the meanings of essential keywords.</p>