



Curriculum Plans – Year 7 – Science – Academic Year 2023/24

Please find below a detailed outline of the curriculum covered in *Science* through Year 7 in *Key Stage 3*.

BLOCK	1	2	3	4	5	6	7
Dates	28th August - 27th September (5 weeks)	2nd October - 27th October (4 weeks)	6th November - 15th December (6 weeks)	3rd January - 2nd February (5 weeks)	12th February - 22nd March (6 weeks)	2nd April - 26th April (4 weeks)	6th May - 21st June (7 weeks)
Topics	Introduction to Science <ul style="list-style-type: none"> • Lab safety • Bunsen burner • Practical skills • Planning skills • Scientific thinking/questions • Variables • Evaluation and conclusions • Results and graphs • Microscopy and magnification States of Matter (Chem Unit 1) <ul style="list-style-type: none"> • The particle theory of matter • Boiling, evaporating and condensing • Melting, freezing, and subliming • Energy and changes of state • Using particle theory to explain dissolving • Practical skills 	Forces (Phy Unit 1) <ul style="list-style-type: none"> • Introduction to forces • Balanced forces • Friction • Gravity • Air resistance • Tension and upthrust • Practical skills Plants (Bio Unit 1) <ul style="list-style-type: none"> • Leaves, stems, and roots • Tropism 	Humans (Bio Unit 2) <ul style="list-style-type: none"> • The human skeleton • Muscles and movement • Organ systems • The circulatory system • Studying the human body • Extending lives Energy (Phy Unit 2) <ul style="list-style-type: none"> • What is energy? • Energy from the Sun • Energy types • Energy transfer • Conservation of energy • Gravitational potential energy and kinetic energy • Elastic potential energy Material Properties (Chem Unit 2) <ul style="list-style-type: none"> • Introducing elements • Metal elements • Non-metal elements • Metal alloys • Material properties • Polymers • Practical skills 	The Earth and Beyond (Phy Unit 3) <ul style="list-style-type: none"> • The night sky • Day and night • The seasons • Stars • Our Solar System • The Moon • The origin of the Universe Cells and organisms (Bio Unit 3) <ul style="list-style-type: none"> • The characteristics of living things • Microbes • Louis Pasteur • Useful micro-organisms • Plant and animal cells • Specialised cells • Nerves • Tissue and organs • Practical skills and microscopy 	Material changes (Chem Unit 3) <ul style="list-style-type: none"> • Acids and alkalis • The pH scale and indicators • Neutralisation • Antacids • Practical skills The Earth (Chem Unit 4) <ul style="list-style-type: none"> • The structure of the Earth • Igneous rocks • Sedimentary rocks • Sedimentary rock formation • Metamorphic rocks • Soil • Fossils • Estimating the age of the Earth • Practical skills Living things in their environment (Bio Unit 4) <ul style="list-style-type: none"> • Habitats • Food chains • Feeding ourselves • Changing the planet • Preventing extinction • Obtaining energy • Growing fuels 	Variation and classification (Bio Unit 5) <ul style="list-style-type: none"> • Variation • Species • Classification • Vertebrates • Classification of plants Revision of Year 7 Topics	Revision of Year 7 topics End of Y7 Assessment Project Work <ul style="list-style-type: none"> • Planning skills • Recording skills • Analysis skills • Conclusions and improvements • Reporting skills
Assessments	Block 1 topics assessment	Block 1 and 2 topics assessment	Block 1-3 topics assessment	Block 1-4 topics assessment	Block 1-5 topics assessment		End of Year 7 Assessment