Curriculum Plans – Year 7 – Science

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	**August - September** (5 weeks)	**October** (4 weeks)	**November - December** (6 weeks)	**January - February** (5 weeks)	**February - March** (6 weeks)	**April** (4 weeks)	**May - June** (7 weeks)
Topics	**Introduction to Science** • 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) • 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) • Introduction to forces • Balanced forces • Friction • Gravity • Air resistance • Tension and upthrust • Practical skills **Plants** (Bio Unit 1) • Leaves, stems, and roots • Tropism	**Humans** (Bio Unit 2) • The human skeleton • Muscles and movement • Organ systems • The circulatory system • Studying the human body • Extending lives **Energy** (Phy Unit 2) • 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) • Introducing elements • Metal elements • Non-metal elements • Metal alloys • Material properties • Polymers • Practical skills	**The Earth and Beyond** (Phy Unit 3) • 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) • 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) • Acids and alkalis • The pH scale and indicators • Neutralisation • Antacids • Practical skills **The Earth** (Chem Unit 4) • 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) • Habitats • Food chains • Feeding ourselves • Changing the planet • Preventing extinction • Obtaining energy • Growing fuels	**Variation and classification** (Bio Unit 5) • Variation • Species • Classification • Vertebrates • Classification of plants **Revision of Year 7 Topics**	**Revision of Year 7 topics** **End of Y7 Assessment** **Project Work** • 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
Academic Theme	Planning for Tomorrow	The World around us	Better Together	The Working World	Opportunities for Everyone	Keep it Green, Keep it Clean	Healthy Body,

							Healthy Mind