



Curriculum Plans – Year 8 - Science – Academic Year 2023/24

Please find below a detailed outline of the curriculum covered in *Science* through Year 8 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	Forces (Phy Unit 4) <ul style="list-style-type: none"> Speed Taking accurate measurements Distance-time graphs Acceleration and speed-time graphs Velocity Acceleration Presenting results in tables and graphs Practical skills Plants (Bio Unit 6) <ul style="list-style-type: none"> Why we need plants Photosynthesis Water and minerals Stomata Microscopy and magnification States of Matter (Chem Unit 5) <ul style="list-style-type: none"> The states of matter revisited Diffusion Brownian motion Density Gas pressure Practical skills 	Sound (Phy Unit 5) <ul style="list-style-type: none"> Types of waves Sound, vibrations, and energy transfer Detecting sounds Loudness and the decibel scale Loudness, amplitude, and oscilloscope Pitch and frequency Making simple calculations Echoes Practical skills Material Properties (Chem Unit 6) <ul style="list-style-type: none"> Atoms Elements and their symbols Explaining differences between metals and non-metals Compounds Making compounds 	Material Properties (Chem Unit 6) <ul style="list-style-type: none"> Naming compounds and writing formulae Oxides, hydroxides, sulfates, carbonates and chlorides Filtering and decanting Evaporation and simple distillation Fractional distillation Chromatography Separating metals from their ores Practical skills Diet (Bio Unit 7) <ul style="list-style-type: none"> Food A balanced diet Deficiencies Digestion (Bio Unit 8) <ul style="list-style-type: none"> The digestive system Enzymes Using enzymes 	Light (Phy Unit 6) <ul style="list-style-type: none"> What is light? How do we see things? Reflection Making measurements- laws of reflection Refraction: air and water Refraction: air and gas Dispersion Colour Presenting conclusions: more on colour Lasers Practical skills Circulation (Bio Unit 9) <ul style="list-style-type: none"> Blood Anaemia The circulatory system Diet and fitness Microscopy 	Respiration and Breathing (Bio Unit 10) <ul style="list-style-type: none"> Lungs Respiration and gas exchange Anaerobic respiration Smoking and lung damage Material changes (Chem Unit 7) <ul style="list-style-type: none"> Chemical reactions Word equations More chemical formulae Corrosion reactions Using reactions to identify chemicals Practical skills Magnetism (Phy Unit 7) <ul style="list-style-type: none"> The properties of magnets Magnetic fields Electromagnets Identifying and controlling variables Using electromagnets Practical skills 	Reproduction and Fetal Development (Bio Unit 11) <ul style="list-style-type: none"> Reproduction Fetal development Twins Adolescence Drugs and Disease (Bio Unit 12) <ul style="list-style-type: none"> Drugs Disease Defense against disease Boosting your immunity Revision of Y8 topics	Revision of Y8 topics End of Year 8 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