



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) Speed Taking accurate measurement s Distance- time graphs Acceleration and speed- time graphs Velocity Acceleration Presenting results in tables and graphs Practical skills Plants (Bio Unit 6) Why we need plants Photosynthes is Water and minerals Stomata Microscopy and magnification States of Matter (Chem Unit 5) The states of matter revisited Diffusion Brownian motion Density Gas pressure Practical skills	Sound (Phy Unit 5) Types of waves Sound, vibrations, and energy transfer Detecting sounds Loudness and the decibel scale Loudness, amplitude, and oscilloscope s Pitch and frequency Making simple calculations Echoes Practical skills Material Properties (Chem Unit 6) Atoms Elements and their symbols Explaining differences between metals and non-metals Compounds Making compounds	Material Properties (Chem Unit 6) Naming compounds and writing formulae Oxides, hydroxides, sulfates, carbonates and chlorides Filtering and decanting Evaporation and simple distillation Fractional distillation Chromatograp hy Separating metals from their ores Practical skills Diet (Bio Unit 7) Food A balanced diet Deficiencies Digestion (Bio Unit 8) The digestive system Enzymes Using enzymes	Light (Phy Unit 6) • 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) • Blood • Anaemia • The circulatory system • Diet and fitness • Microscopy	Respiration and Breathing (Bio Unit 10) Lungs Respiration and gas exchange Anaerobic respiration Smoking and lung damage Material changes (Chem Unit 7) Chemical reactions Word equations More chemical formulae Corrosion reactions Using reactions to identify chemicals Practical skills Magnetism (Phy Unit 7) The properties of magnets Magnetic fields Electromagnet s Identifying and controlling variables Using electromagnet s Identifying and controlling variables Using electromagnet s	Reproduction and Fetal Development (Bio Unit 11) Reproduction Fetal development Twins Adolescence Drugs and Disease (Bio Unit 12) Drugs Disease Defense against disease Boosting your immunity Revision of Y8 topics	Revision of Y8 topics End of Year 8 Assessment Project Work Planning skills Recording skills Analysis skills Conclusions and improvemen ts Reporting skills
Assess ments	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





Acade mic 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
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