



## Curriculum Plans - Year 8 - Science

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	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	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	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



