

Topics are taught on a rotation basis; each class will cover all of the content below but may be studying it at different points in the year.

	Throughout the year the following topics are covered								
7	Topic: B1 Cells  Microscopes Cell Structure Animal & Plant cells Diffusion Specialised Cells  Topic: P1 Energy  Fuels & Energy Stores Energy Stores & Transfers Power Energy Resources	Topic: C1 Particles  Simple Particle Model Properties of Different States of Matter Changes of State Gas Pressure  Topic: C2 Atoms, Elements & Compounds  The Atomic Model Symbols & Formulae Elements & Compounds	Topic: P2 Speed  Speed Distance-time Graphs Relative Motion  Topic: B2 Skeletal & Muscular Systems & Organisation  The Skeleton Biomechanics Principles of Organisation	Topic: C3 Pure & Impure Substances  Diffusion Pure & Impure Separation	Topic: P3 Forces  Basic Forces & Diagrams Naming & Categorising Forces Stretching & Squashing Forces Hooke's Law & Work Done Moments & Simple Machines Balanced Forces Forces & Motion	Constant topic throughout the year: Working scientifically Asking scientific question Planning investigations Recording, analysing and evaluating data			
8	Topic: B3 Nutrition & Digestion  Testing food for nutrients Healthy and unhealthy diets Bacteria and enzymes in digestion Drugs ,alcohol and smoking  Topic: P4 Pressure in Fluids  Pressure in Liquids Atmospheric Pressure Pressure Calculations	Topic: C4 Chemical Reactions  Reactions, Conventions & Signs a Reaction has Occurred Combustion, Thermal Decomposition, Oxidation & Displacement Conservation of Mass Acids, Alkalis & pH Reactions of Acids with Metals & Alkalis  Topic: C5 Energy Changes  Changes of State Endothermic & Exothermic Reactions	Topic: P5 Sound  Types of Waves Sound Waves Microphones & Ultrasound	Topic: P6 Light  Light & Ray Models Interactions of Light Waves with Materials Mirrors, Pinhole Cameras & the Eye Detecting Light & Colour	Topic: B4 Gas Exchange Systems  Ventilation Gas Exchange Exercise. Asthma & Smoking  Topic: B5 Reproduction  Sexual Reproduction & the Reproductive Organs Fertilisation Fetal Development The Menstrual Cycle Plant Reproduction	Constant topic throughout the year: Working scientifically Asking scientific question Planning investigations Recording, analysing and evaluating data			
9	Topic: B6 Photosynthesis  Photosynthesis Leaf Structure  Topic: P7 Electricity in Circuits  Conductors & Insulators Circuits, Current, Potential Difference & Resistance Series & Parallel Circuits	Topic: C6 The Periodic Table  Properties of Metals & Non-Metals Groups, Periods, Metals & Non-Metals  Topic: C7 Materials  Metal Reactivity Metal Extraction with Carbon Ceramics, Polymers & Composites	Topic: B7 Respiration  Aerobic Respiration  Anaerobic Respiration  Topic: P8 Static Electricity  Static Charges Electric Fields	Topic: B8 Ecosystems  Food Chains Food Webs & Interdependence Insect Pollination & Food Security  Topic: P9 Magnets  Magnets & Magnetic Fields Earth's Magnetism Electromagnets & Motors	Topic: B9 Inheritance  DNA and Chromosomes Variation Competition & Natural Selection Biodiversity  Topic: P10 The Particle Model (Physics)  Particle Motion & Density Energy in Matter  Topic: P11 Space  Stars, Planets & Galaxies The Seasons Weight	Constant topic throughout the year: Working scientifically Asking scientific question Planning investigations Recording, analysing and evaluating data  End of key stage assessment			