



	Year 7	Year 8	Year 9
Autumn 1	<p>Structure and Function of Living Organisms</p> <ul style="list-style-type: none"> • Cells and organisation • Skeletal and muscular systems • Nutrition and digestion • Cellular respiration <p>Light Microscope / Cell Wall / Cell Membrane / Cytoplasm / Nucleus / Vacuole / Mitochondria / Chloroplast / Diffusion / Adaptations</p>	<p>Genetics and Evolution</p> <ul style="list-style-type: none"> • Inheritance, chromosomes, DNA and genes • Gas exchange systems • Reproduction • Health <p>Hereditary / Chromosome / Gene / DNA / Species / Continuous / Discontinuous / Variation / Organism / Natural Selection / Adapt / Reproduce / Extinction / Biodiversity / Compete / Carbohydrate / Lipid / Proteins / Vitamins / Minerals / Fibre / Obesity / Starvation / Deficiency / Bacteria / Photosynthesis</p>	<p>Matter</p> <ul style="list-style-type: none"> • Physical changes • Particle model • Energy in matter <p>Conservation / Mass / Reversibility / Evaporation / Sublimation / Condensation / Dissolving / Density / Diffusion / Concentration / Anomaly / Atom / Molecule / Particle / Proton / Electron / Neutron / Ion / Isotope</p>
Autumn 2	<p>The particulate nature of matter</p> <p>Atoms, elements, and compounds</p>	<p>Waves</p> <ul style="list-style-type: none"> • Observed waves • Sound waves • Energy and waves 	<p>The particulate nature of matter</p> <p>Atoms, elements, and compounds</p>

	<p>Pure and impure substance</p> <p>Solid / Liquid / Gas / Pressure / Atom / Element / Compound / Mass / Pure Substance / Dissolving / Diffusion / Filtration / Evaporation / Distillation / Chromatography</p>	<ul style="list-style-type: none"> • Light waves <p>Undulations / Transverse / Longitudinal / Echo / Reflection / Absorption / Frequency / Vacuum / Diffuse Scattering / Refraction / Convex Lens / Retina</p>	<p>Pure and impure substance</p> <p>Conservation / Mass / Reversibility / Evaporation / Sublimation / Condensation / Dissolving / Density / Diffusion / Concentration / Anomaly / Atom / Molecule / Particle / Proton / Electron / Neutron</p>
Spring 1	<p>Motions and Forces</p> <ul style="list-style-type: none"> • Describing motion • Forces • Pressure in fluids • Balanced forces • Forces and motion <p>Average Speed / Relative Motion / Deforming / Resistance / Newton / Work / Pressure / Upthrust</p>	<p>Chemical Reactions</p> <p>Energetics</p> <p>Atom / Combustion / Thermal Decomposition / Oxidation / Acid / Alkali / Neutralisation / Catalyst / Endothermic / Exothermic</p>	<p>Structure and Function of Living Organisms</p> <ul style="list-style-type: none"> • Cells and organisation • Skeletal and muscular systems • Nutrition and digestion • Cellular respiration <p>Light Microscope / Cell wall / Cell Membrane / Cytoplasm / Nucleus / Vacuole / Mitochondria / Chloroplast / Diffusion / Adaptations</p>
Spring 2	<p>Structure and Function of Living Organisms</p> <ul style="list-style-type: none"> • Gas exchange systems • Reproduction • Health <p>Gas Exchange System / Asthma / Leaf Stomata / Menstrual Cycle / Hormones</p>	<p>Material Cycles and Energy - Photosynthesis</p> <p>Interactions and Interdependencies – Relationships in an Ecosystem</p>	<p>Waves</p> <ul style="list-style-type: none"> • Observed waves • Sound waves • Energy and waves • Light waves <p>Undulations / Transverse / Longitudinal / Echo / Reflection / Absorption / Frequency / Vacuum / Diffuse Scattering /</p>

	/ Gametes / Fertilisation / Gestation / Maternal / Foetus / Placenta / Pollination	Photosynthesis / Photosynthetic Organism / Organic Molecule / Energy / Oxygen / Carbon Dioxide / Adaptation / Interdependence / Ecosystem / Food Web / Pollination / Accumulation	Refraction / Convex Lens / Retina
Summer 1	<p>The Periodic Table</p> <p>Materials</p> <p>Physical Properties / Chemical Properties / Metal / Non-Metal / Oxides / Reactivity Series / Ceramic / Polymer / Composite</p>	<p>Earth and the Atmosphere</p> <p>Space Physics</p> <p>Rock Cycle / Igneous / Sedimentary / Metamorphic / Carbon Cycle / Atmospheric / Climate / Gravity / Star / Galaxy / Hemisphere / Astronomical Distance</p>	<p>Structure and Function of Living Organisms</p> <ul style="list-style-type: none"> • Cells and organisation • Skeletal and muscular systems • Nutrition and digestion • Cellular respiration <p>Carbohydrate / Lipid / Proteins / Vitamins / Minerals / Fibre / Obesity / Starvation / Deficiency / Bacteria</p>
Summer 2	<p>Electricity and Electromagnetism</p> <ul style="list-style-type: none"> • Current electricity • Static electricity • magnetism <p>Current / Amperes / Circuit / Potential Difference / Voltage / Battery / Resistance / Electrons / Conductor / Insulator / Attraction / Repulsion / Electromagnet</p>	<p>Energy</p> <ul style="list-style-type: none"> • Calculations of fuel uses and costs in domestic contexts • Energy changes and transfers • Changes in systems <p>Joule (kilojoule) / Watt (kilowatt) / Simple Machine / Force / Thermal Equilibrium / Conduction / Radiation / Insulator / Motion / Metabolism / Elastic Distortion</p>	<p>Plants</p> <ul style="list-style-type: none"> • Tissues and structures • Transpiration • Photosynthesis <p>Photosynthesis / Photosynthetic Organism / Organic Molecule / Energy / Oxygen / Carbon Dioxide / Adaptation / Transpiration</p>

