

Year 8 Science

	Electromagnets		Matter	Organisms	
Cycle 1	<p>Science skills review</p> <p>Magnetism</p> <ul style="list-style-type: none"> • Magnets • Magnetic fields <p>Electromagnets</p> <ul style="list-style-type: none"> • Electromagnets • Using electromagnets 	Mid cycle 1 assessment	<p>Elements</p> <ul style="list-style-type: none"> • Elements • Atoms • Compounds • Chemical formulae • Polymers <p>Periodic table</p> <ul style="list-style-type: none"> • The periodic table • Group 1 elements • Group 7 elements • Group 0 elements 	<p>Breathing</p> <ul style="list-style-type: none"> • Gas exchange • Breathing • Drugs • Alcohol • Smoking <p>Digestion</p> <ul style="list-style-type: none"> • Nutrients • Food tests • Unhealthy diet • Digestive system • Bacteria and enzymes 	End of cycle 1 assessment
	Genes		Earth	Forces and Energy	
Cycle 2	<p>Evolution</p> <ul style="list-style-type: none"> • Natural selection • Charles Darwin • Extinction • Preserving biodiversity <p>Inheritance</p> <ul style="list-style-type: none"> • Inheritance • DNA • Genetics • Genetic modification 	Mid cycle 2 assessment	<p>Climate</p> <ul style="list-style-type: none"> • Global warming • The carbon cycle • Climate change <p>Earth resources</p> <ul style="list-style-type: none"> • Extracting metals • Recycling 	<p>Contact forces</p> <ul style="list-style-type: none"> • Friction and drag • Squashing and stretching • Turning forces <p>Pressure</p> <ul style="list-style-type: none"> • Pressure in gases • Pressure in liquids • Stress on solids <p>Work</p> <ul style="list-style-type: none"> • Work, energy and machines <p>Heating and cooling</p> <ul style="list-style-type: none"> • Energy and temperature • Energy transfer - particles • Energy transfer – radiation and insulation 	End of cycle 2 assessment
	Reactions		Waves	Ecosystems	
Cycle 3	<p>Types of reaction</p> <ul style="list-style-type: none"> • Atoms in chemical reactions • Combustion • Thermal decomposition • Conservation of mass <p>Chemical energy</p> <ul style="list-style-type: none"> • Exothermic and endothermic • Energy level diagrams • Bond energies 	Mid cycle 3 assessment	<p>Wave effects</p> <ul style="list-style-type: none"> • Sound waves and energy • Water waves and energy • Radiation and energy <p>Wave properties</p> <ul style="list-style-type: none"> • Modelling waves 	<p>Respiration</p> <ul style="list-style-type: none"> • Aerobic respiration • Anaerobic respiration • Biotechnology <p>Photosynthesis</p> <ul style="list-style-type: none"> • Photosynthesis • Leaves • Investigating photosynthesis • Plant minerals 	End of cycle 3 assessment