

YEAR 8 CURRICULUM INFORMATION – KS3 Science

	Summer 1	Summer 2
What will students be learning?	<p>Biology:</p> <p>Evolution:</p> <ul style="list-style-type: none"> • Natural selection • Charles Darwin • Extinction • Preserving biodiversity <p>Chemistry:</p> <p>Earth's structure:</p> <ul style="list-style-type: none"> • The structure of the Earth • Sedimentary rocks • Igneous and metamorphic rocks • The rock cycle • Ceramics <p>Physics:</p> <p>Electricity:</p> <ul style="list-style-type: none"> • Potential difference • Resistance • Series and parallel circuits • Current • Charging up 	<p>Biology:</p> <p>Inheritance:</p> <ul style="list-style-type: none"> • Inheritance • DNA • Genetics • Genetic modification <p>Chemistry:</p> <p>Climate and resources:</p> <ul style="list-style-type: none"> • Global warming • The carbon cycle • Climate change • Extracting metals • Recycling <p>Physics:</p> <p>Magnetism:</p> <ul style="list-style-type: none"> • Magnets • Magnetic fields • Electromagnets • Using electromagnets <p>Followed by consolidation and revision time for end of year tests</p>
How will students be assessed?	<p>Milestone assessments</p> <p>In lesson interim knowledge checks</p>	<p>Milestone assessments</p> <p>In lesson interim knowledge checks</p> <p>BASE Assessment</p>
Literacy – What keywords will be taught?	<p>Biology:</p> <p>evolution, fossil, natural selection, peer review, extinct, competition, biodiversity, population, endangered species, conservation, captive breeding, gene bank,</p> <p>Chemistry:</p> <p>crust, mantle, core, mineral, sedimentary rock, igneous rock, metamorphic rock, porous, weathering, sediment, erosion, transport,</p>	<p>Biology:</p> <p>inherited characteristics, DNA, chromosome, gene, mutation, allele, dominant, recessive, Punnett square, genetic modification</p> <p>Chemistry:</p> <p>atmosphere. Greenhouse effect, greenhouse gas, global warming, respiration,</p>

	<p>deposition, strata, igneous, durable, magma, lava, metamorphic, rock cycle, uplift, ceramic</p> <p>Physics: cell, battery, potential difference, voltmeter, volts, rating, voltage, resistance, ohms, electrical conductors, electrical insulator, series, parallel, current, ammeter, motors, electric charge, attract, repel, electrostatic force, atoms, electrons, neutral, charged up, negatively charged, positively charged, lightning electric field.</p>	<p>combustion, fossil fuel, photosynthesis, carbon cycle, carbon sink, climate change, natural resources, mineral, ore, extraction, electrolysis, recycling</p> <p>Physics: magnet, magnetic poles, magnetic field, magnetic force, magnetic field lines, permanent magnet, solenoid, electromagnet, core, magnetise, electric bell, circuit breaker, loudspeaker</p>
What employability skills are being developed?	<p>Interpersonal skills Group work Logical and lateral thinking Developing links between topics and ideas Investigative skills Analytical skills</p>	<p>Interpersonal skills Group work Logical and lateral thinking Developing links between topics and ideas Investigative skills Analytical skills</p>
Wider Curriculum Links?	<p>Maths: measuring angles Food/gardening/horticulture Links with other STEM subjects</p>	<p>Maths: measuring angles Food/gardening/horticulture Links with other STEM subjects</p>
What useful websites are there for this topic?	<p>BBC Bitesize KS3 Science KS3 Science - BBC Bitesize</p>	<p>BBC Bitesize KS3 Science KS3 Science - BBC Bitesize</p>
What wider reading could be done for this topic?	<p>There are a selection of KS3 revision guides available online such as: CGP KS3 Science CGP Books Oxford University Press: Activate KS3 Science</p>	<p>There are a selection of KS3 revision guides available online such as: CGP KS3 Science CGP Books Oxford University Press: Activate KS3 Science</p>
What else can students be doing independently to develop their understanding of this topic?	<p>Regularly reviewing work and topics completed in lessons Completing further reading around the topics covered Revise for milestone assessments Practice mathematical skills such as range, mean, percentages and graph skills etc</p>	<p>Regularly reviewing work and topics completed in lessons Completing further reading around the topics covered Revise for milestone assessments Practice mathematical skills such as range, mean, percentages and graph skills etc</p>