Science Curriculum

Science Pillars		KS3 Prior Knowledge:
	Forces	✓Contact forces ✓Gravity and space ✓Motion ✓Newtons laws ✓Forces in action
	Electricity	✓Circuits ✓Magnetism
	Energy	✓Energy in Fuels ✓Energy resources ✓Energy transfers
	Waves	✓Light and sound ✓Wave Basics
	Matter	✓Particle model and elements ✓Gas pressure ✓Periodic ✓Purity and separation techniques ✓Density ✓Specific Heat capacity
	Reactions	✓Reactions ✓Acids and Alkalis ✓Metals and non-Metals ✓Displacement Reactions Bonding
	Earth	✓Global Warming ✓Earth Structure
	Organisms	✓Cells and diffusion ✓Organ systems and breathing ✓Food tests ✓Digestion ✓Cell Structures ✓Human Reproduction
	Ecosystems	✓Plant reproduction Respiration ✓Photosynthesis
	Genes	✓Variation ✓Inheritance

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
10	Coordination and control – Nervous system	Coordination and control – Endocrine system	Maintaining internal environments	Ecosystems	Inheritance	Natural selection
	Energetics	Electrolysis	Further chemical reactions	Predicting chemical reactions	Controlling chemical reactions	Equilibria
	Static and charge	Further Circuits	Electromagnetic spectrum	Radioactivity	Work done	Power
11	Monitoring and maintaining environment	Monitoring and maintain health	Mastery of Biology		External exams	
	Improving processes and products	Interpreting and interacting with earth system	Mastery of Chemistry		External exams	
	Physics on the move	Powering the earth	Mastery of Physics		External exams	

KS4 Practical Skills

Analysis and conclusion of investigations → Evaluations including improvements in accuracy and reliability

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Science Curriculum

Science Pillars		KS2 Prior Knowledge:
	Forces	✓Space and orbits ✓Basic forces ✓Magnets
	Electricity	✓Construction of circuits ✓Bulb brightness associated with voltage
	Energy	✓Sound as a type of energy
	Waves	✓Basics of light
	Matter	✓Material properties ✓Dissolving
	Reactions	✓Some reactions are reversible some are irreversible
	Earth	✓Rocks
	Organisms	✓Life cycles of animals ✓Growth development of humans ✓Basic parts of the human body
	Ecosystems	✓Classification
	Genes	✓Adaptation ✓Inheritance of characteristics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Cells and diffusion	Organ systems and breathing	Particle model and elements	Gas pressure	Contact forces	Gravity and space
	Human Reproduction	Plant reproduction	Reactions	Acids and Alkalis	Light and sound	Waves
8	Food tests	Digestion	Respiration	Photosynthesis	Variation	Inheritance
	Periodic table	Metals and non-Metals	Displacement Reactions	Separating mixtures	Global Warming	Earth
	Circuits	Magnetism	Energy in Fuels	Energy resources	Energy transfers	Motion
9	Cell Structures	Further respiration	Further Photosynthesis	Supplying the cell	Challenges of size	Investigation Projects
	Particle Model	Atomic structure	Bonding	Purity and separation techniques	Properties of materials	Investigation Projects
	Density	Specific Heat capacity	Further Motion	Newtons laws	Forces in action	Investigation Projects

KS3 Practical Skills

Name and use correct Science equipment → Understanding and justification of science equipment → Investigation methods

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