

Two-year Scheme of Work

This plan assumes that students are tested in Year 8 and is therefore timed to fit into five terms. If you will not be testing, or plan to test in Year 9, this constraint may be eased and the course set to occupy a full six terms.

The fundamental premise of this scheme is to run the course with five broad themes, generally corresponding to the five key ideas, but developed to allow for new areas such as Psychology. The main themes are: Life and Living Processes; Energy; Particles and materials; Interdependence; Forces. Each unit runs for six weeks and the themes then repeat. The content is indicated by reference to the more critical lessons. However, it is essential that you don't ignore the other material but draw upon it to produce a well-rounded course. One of the particularly critical aspects is that the formative assessment strategies that are built in to each topic on the full course are retained, albeit integrated with other lesson activities, so that students and teachers are well aware of the learning progress and needs.

Key

MC = main content lesson

MCP = main content with Science in Practice

HSW = How Science Works mid-topic assessment

Year 7			
Theme	Lesson Type	Lesson Title	Unit – where 1.3 is Book 1, Topic 3
Life and Living Processes 1	MCP	Studying plant cells	1.1
	MC	Studying animal cells	1.1
	MC	Designed for a purpose	1.1
	MC	Cells, tissues and organs	1.1
	MC	Fertilisation and conception	1.2
	MC	Becoming an adult	1.2
	MC	How a baby develops	1.2
	MC	Birth of the baby	1.2
	MC	Reproduction in flowering plants	1.2
	MC	How do we classify?	1.2
	MCP	Are leaves bigger in the shade?	1.2
	MC	A balanced diet	2.1
	MCP	Eating food	2.1
	MC	Do I have enough energy?	2.1
	MC	A breath of fresh air	2.1
	MC	A healthy heart	2.1
	MC	Measuring your pulse	2.1
	MC	How do you know if you are fit?	2.1

Year 7 (continued)			
Theme	Lesson Type	Lesson Title	Unit - where 1.3 is Book 1, Topic 3
Energy 1	MC	Types of energy	1.5
	MCP	Changing energy	1.5
	MC	Tracking energy transfers	1.5
	MC	What are fuels?	1.5
	MCP	Energy release from fuels	1.5
	MCP	Conductors and insulators	1.5
	MC	Current in circuits	1.5
	MC	Energy in circuits	1.5
	MC	Power stations	2.5
	MC	Burning problems	2.5
	MC	Renewable energy resources	2.5
	MC	Heat and Temperature	2.5
	MC	Getting warmer	2.5
	MC	Conduction	2.5
	MC	Convection	2.5
MCP	Radiation	2.5	
Particles and materials 1	MC	Hazard warning signs	1.3
	MC	What makes things burn?	1.3
	MC	Acids and alkalis	1.3
	MC	Indicators	1.3
	MC	Neutralisation	1.3
	MC	Particle world	1.4
	MCP	How does heat change things?	1.4
	MC	Reactions running backwards	1.4
	MC	Our watery world	1.4
	MC	Chemical reactions	1.4
	MCP	How does the mass change?	1.4
	MCP	Spreading out	1.4
	MCP	Distillation	2.3
	MCP	Chromatography	2.3
Interdependence 1	MCP	What conditions do animals prefer?	1.7
	MC	How plants and animals survive	1.7
	MC	Why do we need plants?	1.7
	MC	Food chains and webs	1.7
	MC	Water for plants	1.7
	MC	How do we classify?	1.7
	MC	The five kingdoms	1.7
	MCP	Are leaves bigger in the shade?	1.7
	MC	Design a predator	2.7
	MC	Where has the ox gone?	2.7
	MC	Population models	2.7
	MC	Recycling Rotters	2.7
	MC	Populations	2.7
MC	Biological control	2.7	

Year 7 (continued)			
Theme	Lesson Type	Lesson Title	Unit - where 1.3 is Book 1, Topic 3
Forces 1	MCP	Measuring the forces around you	1.6
	MC	Different forces around you	1.6
	MC	Balanced and unbalanced forces	1.6
	MC	Speeding along	1.6
	MCP	Measuring the speed	1.6
	MC	Friction	1.6
	MC	Air resistance	1.6
	MC	Streamlining and drag	1.6
	MC	Magnetic materials	2.5
	MCP	Magnetic fields	2.5
	MC	Electromagnetism	2.5
	MC	Day and night	2.8
	MC	The seasons	2.8
	MC	The Moon	2.8
	MC	The Solar System	2.8
Personal and social education	MC	What is a drug?	3.1
	MC	Is alcohol really that good?	3.1
	MC	A nail in the coffin	3.1
	MC	Cannabis	3.1
Geology	MC	How are fossil fuels made	1.8
	MC	Finding fossil fuels	1.8
	MC	Looking at rocks	1.8
	MC	Using rocks	1.8
	MC	Weathering of rocks	1.8
	MC	Rocks and heat	1.8
	MCP	Rapid weathering	1.8
	MCP	Transporting rocks	1.8
	MC	Fossil past	1.8
	MC	Studying sedimentary rocks	3.8
	MC	More about sediments	3.8
	MC	Mountains and folds	3.8
	MC	Metamorphic rocks	3.8
	HSW	Theories of the Earth	3.8
	MCP	Crystals in igneous rocks	3.8
MC	Igneous rocks again	3.8	
MC	The rock cycle	3.8	

End of Year 7.

Year 8			
Theme	Lesson Type	Lesson Title	Unit - where 1.3 is Book 1, Topic 3
Life and Living Processes 2	MC	Detecting my environment	3.1
	MC	Controlling what I do	3.1
	MC	What are we born with?	3.1
	MC	Learning in animals	3.1
	MC	Aggression	3.1
	MCP	How do I learn?	3.1
	MC	Effective Learning	3.1
	MC	Why are we different?	3.2
	MCP	How tall is this group?	3.2
	MC	What can twins tell us?	3.2
	MC	It came from my parents	3.2
	MC	Natural Clones	3.2
	MC	Dog breeding	3.2
Energy 2	MCP	What is sound?	2.6
	MC	Describing Sound	2.6
	MC	Speed of sound	2.6
	MC	Sound waves	2.6
	MC	Sound in solids, liquids and gases	2.6
	MC	Ultrasonic sounds	2.6
	MC	The ear and hearing	2.6
	MC	Damaging our hearing	2.6
	MC	Sources of Light	3.6
	MCP	Plane mirrors	3.6
	MC	Convex and concave mirrors	3.6
	MC	Refraction in glass blocks	3.6
	MC	Total internal reflection	3.6
	MC	Isaac Newton the optickian	3.6
	MC	Colour	3.6
	MC	Using Colour	3.6
	MC	Seeing the light	3.6
Particles and materials 2	MC	Getting Sorted	2.4
	MCP	What are compounds?	2.4
	MC	Understanding Equations	2.4
	MC	Combining elements	2.4
	MC	Corrosion of metals	3.3
	MC	How to stop corrosion	3.3
	MC	The alkali metals	3.3
	MC	Word and symbol equations	3.3
	MC	Reacting metals	3.3
	MCP	Metals and acid	3.3
	MC	Displacement of metals	3.3
	MC	Predicting a reaction	3.3
	MC	Properties of metals and non metals	3.4
	MC	Reactions of metal oxides and hydroxides with acids	3.4
	MC	Reactions of metal carbonates with acids	3.4
	MC	Salts	3.4
	MCP	Making a salt	3.4
	MCP	Making a salt by precipitation	3.4
MC	Using salts	3.4	

Year 8 (continued)			
Theme	Lesson Type	Lesson Title	Unit - where 1.3 is Book 1, Topic 3
Interdependence 2	MC	What resources do we need?	3.7
	MC	What happened to the atmosphere?	3.7
	MC	The effect of acid on plants	3.7
	MCP	How clean is our air?	3.7
	HSW	Global Warming	3.7
	MC	Looking at your surroundings	3.7
	MC	Conservation	3.7
	MC	How can we help save our planet?	3.7
	MC	History of disease	2.2
	MC	The infection cycle	2.2
	MC	Preventing disease	2.2
	MC	Sexually transmitted diseases	2.2
	MC	Biological Warfare	2.2
	MC	Vaccination	2.2
	MC	What are vaccines?	2.2
	MCP	How to get rid of microbes	2.2
	MCP	Are microbes useful?	2.2
	Forces 2	MC	Pressure points
MC		Pressure in liquids and gas	3.5
HSW		Hydraulic machines	3.5
MCP		Turning forces and moments	3.5
MC		Speedy Sums	3.5
MC		Distance-Time graphs	3.5
MC		Acceleration	3.5
MC		Gravity and weight	3.5
MC		Satellites	3.5
MC		Space Travel	3.5

End of Year 8.