



Conc epts	Science & Me Science & Industry Science & the World					
Big Ideas	Living Organisms, Matter, Reactions, Earth & Space, Systems, Electricity, Waves & Working Scientifically					
	Year 7	Year 8	Year 9	Year 10	Year 11	
Unit 1	Science & Me Humans & Survival Food Cooking our Food The Digestive System The Circulatory System The Respiratory System Homeostasis Water Regulation Water borne Communicable Disease Homeostasis Body Temperature Keeping Warm Heating Effect of Pollution  Prior Learning: KS2: Plants (Living Organisms) KS2: Animals (Living Organisms) KS2: Living things & their	Science & Me Reproductive System Lifestyle Skeleton & Movement Health & EM Waves  Prior Learning: KS2: Animals (Living Organisms) KS2: Living things & their habitats (Living Organisms) KS2: Light (Waves) KS2: Working Scientifically (Working Scientifically)  Future Learning: KS4: Variation, Reproduction, Inheritance and Evolution (Living Organisms) KS4: Organisation (Living Organisms)	Genetics Bonding, Structure and Properties Forces 3 Bioenergetics (Photosynthesis) Quantitative Chemistry Working Scientifically Genetics 2  Prior Learning: KS2: Animals (Living Organisms) KS2: Everyday Materials (Matter) KS2: Forces (Systems)  Future Learning: KS4: Variation, Reproduction, Inheritance and Evolution (Living Organisms) KS4: Bioenergetics (Living	Cell Biology Chemical bonds (I/C) Particle Model of Matter Transport in cells Quantitative Chemistry Atomic Structure  Prior Learning: KS3: Structure and function of living organisms (Living Organisms) KS3: Particulate nature of matter (Matter) KS3: Atoms, elements and compounds (Matter) KS3: Working Scientifically (Working Scientifically)  Future Learning: KS4: Rate and extent of chemical change (Reactions)	Ecology 2 Electricity 3 - Mains electricity Atomic Structure Homeostasis & Response 1 Homeostasis & Response 2 Magnetism and Electromagnetism Evolution Using Resources Waves  Prior Learning: KS3: Interactions and Interdependencies (Living Organisms) KS3: Structure and function of living organisms (Living Organisms) KS3: Electricity and electromagnetism (Electricity) KS3: Waves (Waves)	



	habitats (Living Organisms) KS2: Everyday Materials (Matter) KS2: Use of everyday materials (Matter) KS2: States of Matter (Matter) KS2: Properties and changes of materials (Matter) KS2: Working Scientifically (Working Scientifically)  Future Learning: KS4: Organisation (Living Organisms) KS4: Energy (Systems) KS4: Working Scientifically (Working Scientifically)	KS4: Electromagnetic Waves (Waves) KS4: Working Scientifically (Working Scientifically)	Organisms) KS4: Quantitative Chemistry (Reactions) KS4: Forces (Systems) KS4: Working Scientifically (Working Scientifically)	KS4: Ecology (Living Organisms) KS4: Organisation (Living Organisms) KS4: Atomic Structure (Matter) KS4: Working Scientifically (Working Scientifically)	KS3: Earth & Atmosphere (Earth)  Future Learning: KS5 A Level Biology KS5 A Level Chemistry KS5 A Level Physics KS4: Working Scientifically (Working Scientifically)
Unit 2	Science & Industry Acids and Alkalis Industrial Reactions Separating Mixtures Plants & Agriculture Using Resources  Prior Learning: KS2: Plants (Living Organisms) KS2: States of Matter (Matter) KS2: Properties and changes of materials (Matter) KS2: Working Scientifically (Working Scientifically)	Science & Industry Reactions in Industry Maximising Industrial Reactions Energy National Grid Atmosphere & Pollution Electromagnetism  Prior Learning: KS2: Electricity (Electricity) KS2: Properties and changes of materials (Matter) KS2: Working Scientifically	Cell Biology Atomic Structure & the Periodic Table 1 Energy 1 Organisation 1 Atomic Structure & the Periodic Table 2 Energy 2 Organisation 2: Digestive System & Digestion Atomic Structure & the Periodic Table 3	Infection and Response Chemical change (Electrolysis) Bioenergetics (Photosynthesis) Bonding and Structure Properties Structure and Bonding of Carbon Energy changes  Prior Learning: KS3: Structure and function of living organisms (Living Organisms) KS3: Material cycles and energy	Radioactivity Chemical Analysis Forces 3 Exam Preparation  Prior Learning: KS3: Science KS4: Science KS4: Science KS4: Atomic Structure (Matter)  Future learning: KS5 A Level Biology KS5 A Level Chemistry



	Future learning: KS4: Chemical change (Reactions) KS4: Atomic Structure & the Periodic Table (Matter) KS4: Bioenergetics (Living Organisms) KS4: Using Resources (Earth & Space) KS4: Working Scientifically (Working Scientifically)	(Working Scientifically)  Future learning:  KS4: Rate & Extent of chemical change (Reactions)  KS4: Energy (Systems)  KS4: Chemistry & our  Atmosphere (Earth & Space)  KS4: Magnetism &  Electromagnetism (Electricity)  KS4: Working Scientifically  (Working Scientifically)	Energy 3 Organisation 3: Cardiovascular System & Transport  Prior Learning: KS3: Structure and Function of Living Organisms (Living Organisms) KS3: Atoms, Elements and Compounds (Reactions) KS3 Pure and impure substances (Matter) KS3: Energy (Systems) KS3: Working Scientifically (Working Scientifically)  Future learning: KS4: Bonding & Structure (Reactions) KS4: Infection and Response (Living Organisms) KS4: Bioenergetics (Living Organisms) KS4: Electricity (Systems) KS4: Working Scientifically (Working Scientifically)	(Living Organisms)  Future learning: KS4: Rate and extent of chemical change (Reactions) KS4: Using resources (Earth & Space) KS4: Organic chemistry (Reactions) KS4: Working Scientifically (Working Scientifically)	KS5 A Level Physics
Unit 3	Science & the World Interdependence Global Food Production Transport of Food Communicable Disease	Science & the World Evolution of the Atmosphere Space Earth's Resources Consequences of Pollution	Bonding and Structure 1: Metallic Bonding Electricity 1: Circuits Organisation 4: Healthy Lifestyles	B1/C1/P1 Complete Quantitative Chemistry Reteach Rate and extent of chemical	Exam Preparation  Prior learning:



Pollution Energy Resources Weather

**Prior Learning:** 

KS2: Plants (Living Organisms)

KS2: Animals (Living

Organisms)

KS2: Living things & their habitats (Living Organisms)

KS2: Properties and changes of

materials (Matter) KS2: Forces (Systems)

KS2: Seasonal changes (Earth

& Space)

KS2: Working Scientifically (Working Scientifically)

Future learning:

KS4: Ecology (Living

Organisms)

KS4: Forces (Systems)

KS4: Infection and Response

(Living Organisms)

KS4: Energy (Systems) KS4: Chemistry of the

Atmosphere (Earth & Space)

KS4: Working Scientifically (Working Scientifically)

Climate

Electromagnetism

**Prior Learning:** 

KS2 : Everyday Materials

(Matter)

KS2: Use of everyday materials (Matter)

KS2: States of Matter (Matter)

KS2: Properties and changes of materials (Matter)

KS2: Seasonal changes (Earth &

Space)

KS2: Earth & Space (Earth &

Space)

KS2: Electricity (Electricity)

KS2: Working Scientifically (Working Scientifically)

Future learning:

KS4: Ecology (Living Organisms)

KS4: Chemistry & our

Atmosphere (Earth & Space)

KS4: Magnetism &

Electromagnetism (Electricity)

KS4: Working Scientifically (Working Scientifically)

Chemical Changes 1: Metals

**Prior Learning:** 

KS3: The Periodic Table

(Reactions)

KS3: Electricity and

Electromagnetism (Electricity)

KS3: Structure and Function of

Living Organisms (Living Organisms)

Future learning:

KS4: Magnetism and

Electromagnetism (Electricity)

KS4: Organisation (Living

Organisms)

KS4: Chemical change

(Reactions)

KS4: Working Scientifically (Working Scientifically)

change

Ecology 1
Forces 1

Magnetism and Electromagnetism

Prior Learning:

KS3: Interactions and interdependencies (Living

Organisms)

KS3: Material cycles and energy

(Living organisms)

KS3: Atoms, elements and compounds (Reactions)

KS3: Chemical reactions

(Reactions)

KS3: Energetics (Reactions)

KS3: The Periodic Table

(Reactions)

KS3: Motion and Forces

(Systems)

KS3: Electricity and

Electromagnetism (Electricity)

KS3: Working Scientifically (Working Scientifically)

Future learning:

KS4: Forces (Systems) KS4: Chemical analysis

(Reactions)

KS4: Ecology (Living Organisms) KS4: Working Scientifically Future learning:

KS5 A Level Biology KS5 A Level Chemistry KS5 A Level Physics



		(Working Scientifically)	