AC v9.0 EP Curriculum Map
Year 5 - 10 Science

Year 5

Biological Sciences

Content Descriptor	EP Lessons in *1. Survival of Living Things (AC9S5U01)*	
AC9S5U01 examine how particular structural features and behaviours of living things enable their survival in specific habitats	**1. Adaptations for Survival** • Introduction to Adaptations • Adaptations in Shape or Form • Adaptations Inside the Body • Adaptations in Behaviour • Nocturnal Activity • Dune Plants • Camouflage • Characteristics and Adaptations of Living Things that Fly **2. Adaptations to Environments** • Environments • Rock Pool Environments • Life in a Rock Pool • Desert Environments • Life in the Desert • Polar Environments • Life at the Poles	**3. Science Investigations** *Blubber Gloves* • Blubber Gloves! • Student Worksheet • Teacher Guide **4. Glossary** • Definitions List: Survival of Living Things • Definitions MCQ: Survival of Living Things • Spelling List: Survival of Living Things **5. Topic Test** • Topic Test: Adaptations

Earth and Space Sciences

Content Descriptor	EP Lessons in *2. Earth's Changes (AC9S5U02)*	
AC9S5U02 describe how weathering, erosion, transportation and deposition cause slow or rapid change to Earth's surface	**1. Weathering and Erosion** • Erosion and Sedimentation • Erosion and Deposition in Rivers • Weathering • Erosion and Deposition in Rivers **2. Landforms** • Desert Landforms • Erosional Coastal Landforms • Erosional Coastal Landforms • Depositional Coastal Landforms • Depositional Coastal Landforms • Desert Landforms • Australian Landforms formed by Physical Weathering, Erosion and Sedimentation • Australian Landforms formed by Volcanism and Chemical Weathering	**3. Science Investigations** *Simulating Erosion* • Simulating Erosion • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx) **4. Glossary** • Spelling List: Earth's Changes

Physical Sciences

Content Descriptor	EP Lessons in *3. Light (AC9S5U03)*	
AC9S5U03 identify sources of light, recognise that light travels in a straight path and describe how shadows are formed and light can be reflected and refracted	**1. The Path of Light** • Light • How Do We See? • The Movement of Light • The Speed of Light • Ray Diagrams • Shadows • Comparing Shadows • Did Someone Say Glow-in-the-dark Platypus? **2. Interaction with Light** • Types of Objects • The Colour of Light • Absorption • Mirrors • Refraction • Extension: Refraction and Ray Diagrams	**3. Science Investigations** *Build a Periscope* • Build a Periscope • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx) **4. Glossary** • Definitions List: Light • Definitions MCQ: Light • Spelling List: Light **5. Topic Test** • Topic Test: Light

Chemical Sciences

Content Descriptor	EP Lessons in *4. States of Matter (AC9S5U04)*	
AC9S5U04 explain observable properties of solids, liquids and gases by modelling the motion and arrangement of particles	**1. Solids, Liquids & Gases** • Introduction to Matter • Solids • Liquids • Gases **2. Exploring States of Matter** • Comparing States of Water • Gases have Masses?	• Secretive Substances • Extreme Conditions **3. Glossary** • Spelling List: States of Matter **4. Topic Test** • Topic Test: States of Matter

Year 6

Biological Sciences

Content Descriptor	EP Lessons in *1. Living Things and Their Environment (AC9S6U01)*	
AC9S6U01 investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions	**1. The Environment** • Living and Non-Living Things • MRS GREN • Environments • Extreme Environments **2. Living Things and their Environments** • Non-Living Factors Affecting Plants • Living Factors Affecting Plants • Non-living Factors Affecting Fungi • Living Factors Affecting Fungi • Non-Living Factors Affecting Animals • Living Factors Affecting Animals • Extreme Environments: The Scorching Deserts • Extreme Environments: The Deep Dark Sea • Extreme Environments: The Freezing Poles • Migration • Hibernation	**3. Science Investigations** *Growing Mould* • Growing Mould! • Student Worksheet • Teacher Guide *Growing Plants under Different Conditions* • Growing Plants under Different Conditions • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Editable Documents - Word (.docx) **4. Glossary** • Definitions List: Living Things and Their Environment • Definitions MCQ: Living Things and Their Environment • Spelling List: Living Things and their Environment **5. Topic Test** • Topic Test: Living Things and Their Environment

Earth and Space Sciences

Content Descriptor	EP Lessons in *2. The Solar System (AC9S6U02)*	
AC9S6U02 describe the movement of Earth and other planets relative to the sun and model how Earth's tilt, rotation on its axis and revolution around the sun relate to cyclic observable phenomena, including variable day and night length	**1. The Solar System** • Introduction to the Solar System • The Sun • Planet Earth • Distances in Space • Gravity and Orbits • Day and Night • Indigenous Constellations **2. Exploring the Planets** • The Inner Planets • The Outer Planets **3. Extension** • Models of the Solar System • Sizes in Space • Years **4. Science Investigations** *A Fruity Solar System* • A Fruity Solar System • Student Worksheet • Teacher Guide	*Modelling The Earth, Moon and Sun* • Modelling The Earth, Moon and Sun • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx) *Seasons and the Angle of the Sun* • Seasons and the Angle of the Sun • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx) **5. Glossary** • Definitions List: The Solar System • Definitions MCQ: The Solar System • Spelling List: The Solar System **6. Topic Test** • Topic Test: The Solar System

Physical Sciences

Content Descriptor	EP Lessons in *3. Electricity (AC9S6U03)*	
AC9S6U03 investigate the transfer and transformation of energy in electrical circuits, including the role of circuit components, insulators and conductors	**1. Introduction to Electricity** • What is Electricity? • Where Electricity Comes From **2. Circuits** • Circuitry • Open and Closed Circuits • Circuit Diagrams • Conductors • Insulators	**3. Glossary** • Definitions List: The Solar System • Definitions MCQ: The Solar System • Spelling List: The Solar System **4. Topic Test** • Topic Test: Electricity

Chemical Sciences

Content Descriptor	EP Lessons in *4. Comparing Reversible and Irreversible Changes (AC9S6U04)*	
AC9S6U04 compare reversible changes, including dissolving and changes of state, and irreversible changes, including cooking and rusting that produce new substances	**1. Reversible Changes** • Physical Changes and Reversible Reactions • Temperature and States of Matter • Changing States Through Heating • Changing States Through Cooling • Melting • Freezing • Boiling and Evaporation • Condensation • Melting Polar Ice **2. Irreversible Changes** • Irreversible Reactions • Cooking and Burning • Rusting • Recycling Plastic • Recycling Glass • Recycling Metal **3. Science Investigations** *Growing Sugar Crystals* • Growing Sugar Crystals • Student Worksheet • Teacher Guide	*Making Ice Cream* • Making Ice Cream • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx) *Making Recycled Paper* • Making Recycled Paper • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx) **4. Glossary** • Definitions List: Comparing Reversible and Irreversible Changes • Definitions MCQ: Comparing Reversible and Irreversible Changes • Spelling List: Comparing Reversible and Irreversible Changes **5. Topic Test** • Topic Test: Chemical Changes

Year 7

An Introduction to Science

Content Descriptor	EP Lessons in *1. An Introduction to Science*	
	• What is Science? • Careers In Science • Safety Guidelines and Hazards • Science Equipment • The Bunsen Burner • Measuring and Reading Scales • Interpreting Diagrams • Scientific Method • Variables • Fair Tests • Repeatability, Reliability and Accuracy • Making Results Tables • Constructing Graphs • Interpreting Graphs • Evaluating in Science	**Practical Investigation: Heating Water** • Pre-Lab Heating Water • Post-Lab Heating Water • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx)

Biological Sciences

Content Descriptor	EP Lessons in *2. Classification (AC9S7U01)*	
AC9S7U01 investigate the role of classification in ordering and organising the diversity of life on Earth and use and develop classification tools including dichotomous keys	**1. Prior Learning** *1. Living and Non-Living* • Living or Non-Living? • MRS GREN *2. Adaptations for Survival* • Introduction to Adaptations • Adaptations in Shape or Form • Adaptations Inside the Body • Adaptations in Behaviour • Nocturnal Activity • Dune Plants • Camouflage *3. Adaptations to Environments* • Environments • Rock Pool Environments • Life in a Rock Pool • Desert Environments • Life in the Desert • Polar Environments • Life at the Poles **2. What is Classification?** • Introduction to Classification • Classification of Life • Classification of Life • Introduction to Classification **3. Dichotomous Keys** • Introduction to Dichotomous Keys • Branching Keys	• Circular Keys • Tabular Keys **4. Linnaean Classification** • Linnaean Classification • Binomial Nomenclature • Species and Hybrids **5. Examples of Classification** • Introduction to Plant Classification • Identifying Species • Animal Phyla • Vertebrates • The Platypus **6. Extension** Carl Linnaeus Dragons in the Deep History of Microscopes Tardigrades in Parking Lots **7. Science Investigations** *Building Dichotomous Keys* Building Dichotomous Keys Risk Assessment (in RiskAssess) Student Worksheet PDF Teacher Guide PDF Laboratory Technician Guide PDF Editable Documents - Word (.docx) *Resources continue on the next page*

	Classifying Leaves • Classifying Leaves • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Editable Documents - Word (.docx) *Researching Phyla* • Researching Phyla • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Editable Documents - Word (.docx) *Using Dichotomous Keys* • Using Dichotomous Keys • Student Worksheet PDF • Teacher Guide PDF • Editable Documents - Word (.docx)	**8. Literacy and Numeracy Tasks** • Comprehension: How Does a Jellyfish Sting? • Comprehension: Tiny, Tubby, Tenacious Tardigrades • Data Interpretation: Guess Who: Animal Edition **9. STEM Activities** • STEM - Kangaroo Counter **10. Glossary** • Definitions List: Classification • Definitions MCQ: Classification • Spelling List: Classification **11. Topic Tests** • Topic Test: Classification and Using Keys • Topic Test: Linnaean Classification
Content Descriptor	**EP Lessons in *3. Interactions in Ecosystems (AC9S7U02)***	
AC9S7U02 use models, including food webs, to represent matter and energy flow in ecosystems and predict the impact of changing abiotic and biotic factors on populations	**1. Prior Learning** *1. The Environment* • Living and Non-Living Things • MRS GREN • Environments • Extreme Environments *2. Living Things and their Environments* • Non-Living Factors Affecting Plants • Living Factors Affecting Plants • Non-living Factors Affecting Fungi • Living Factors Affecting Fungi • Living Factors Affecting Fungi	• Non-Living Factors Affecting Animals • Living Factors Affecting Animals • Extreme Environments: The Scorching Deserts • Extreme Environments: The Deep Dark Sea • Extreme Environments: The Freezing Poles • Migration • Hibernation • Living Things and Their Environment *Resources continue on the next page*

Activity: Growing Mould

- Growing Mould!
- Student Worksheet
- Teacher Guide

2. Ecosystems

- Ecology
- Ecosystems
- Biotic and Abiotic Factors
- Abiotic Factors
- Biotic Factors and Competition

3. Food Chains and Food Webs

- Food Chains
- Food Webs
- Decomposers
- Consumers
- Predators, Prey and Competition
- Predator-Prey Dynamics

4. Impacts on the Environment

- What is Pollution?
- Pollution and Ecosystems
- Oil Pollution and Industrial Waste
- Australian Bushfires
- Climate Change
- Deforestation
- Introduced and Invasive Species
- An Agricultural Affair
- Pesticides
- The Palm Oil Predicament

5. First Nations Australians & Ecosystems

- Introduced Species
- Invasive Species in Australia
- Species Conservation in Australia

6. Extension

- Cane Toads as an Introduced Species
- Diurnal vs Nocturnal
- Ecosystem Conservation
- Interdependent Relationships
- Scientific Methods of Conservation
- Water Pollution and Solutions
- Adaptations

7. Science Investigations

Build a Food Web

- Build a Food Web
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Collecting Invertebrates in Quadrats

- Collecting Invertebrates in Quadrats
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Extracting Leaf Pigments

- Extracting Leaf Pigments
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Resources continue on the next page

	Growing Plants under Different Conditions • Growing Plants under Different Conditions • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Measuring Abiotic Factors in Water* • Measuring Abiotic Factors in Water • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **8. Literacy and Numeracy Tasks** • Comprehension: Sustainable Bush Tucker • Data Interpretation: Marine Ecosystems and Overfishing	**9. STEM Activities** • A Green Utopia • STEM: Alternate Fuels • Vertical Garden **10. Glossary** • Definitions List: Interactions in Ecosystems • Definitions MCQ: Interactions in Ecosystems • Spelling List: Interactions in Ecosystems **11. Topic Test** • Topic Test: Biotic and Abiotic Factors

Earth and Space Sciences

Content Descriptor	EP Lessons in *4. Earth, Moon and Sun (AC9S7U03)*	
AC9S7U03 model cyclic changes in the relative positions of the Earth, sun and moon and explain how these cycles cause eclipses and influence predictable phenomena on Earth, including seasons and tides	**1. Prior Learning** • Planet Earth • Introduction to the Solar System • The Sun • Years • Days • The Inner Planets • The Outer Planets • Sizes in Space • Distances in Space	**2. Earth and the Sun** • Planet Earth • Earth, Moon and Sun • Seasons • Changing Seasons • Effects of Seasonal Change *Resources continue on the next page*

	3. Moon and Eclipses • Tides • Phases of the Moon • Lunar Eclipse • Solar Eclipse **4. First Nations Australian's Astronomy** • Indigenous Australian Constellations • Calendars and the Solar Year **5. Extension** • Asteroids and Meteoroids • Exploring Space • Exploring the Moon, Mars and Beyond • Extension: Planetary Motion • Pluto - The Big Little Planet • The Universe • Time Zones • Comets • Satellites • Telescopes **6. Science Investigations** *Making a Sundial* • Making a Sundial • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Modelling Gravity* • Modelling Gravity • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF	*Modelling The Earth, Moon and Sun* • Modelling The Earth, Moon and Sun • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Pinhole Camera* 1. Making a Pinhole Camera • Making a Pinhole Camera • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF 2. Using a Pinhole Camera • Using a Pinhole Camera to Calculate Diameter of the Sun • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Seasons and the Angle of the Sun* • Seasons and the Angle of the Sun • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	7. Literacy and Numeracy Tasks • Comprehension: Why Doesn't Earth Have Rings? • Data Interpretation: Space Travel: The Weight Loss Sensation! • Data Interpretation: Tides and the Moon	**8. Glossary** • Definitions List: Earth, Moon and Sun • Definitions MCQ: Earth, Moon and Sun • Spelling List: Earth, Moon and Sun **9. Topic Test** • Topic Test: Days, Seasons and Time

Physical Sciences

Content Descriptor	EP Lessons in *5. Forces (AC9S7U04)*	
AC9S7U04 investigate and represent balanced and unbalanced forces, including gravitational force, acting on objects, and relate changes in an object's motion to its mass and the magnitude and direction of forces acting on it	**1. Prior Learning** • Friction • Fact or Friction? • Magnetism *Friction and Mass* • Investigating Friction and Mass • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Friction and Surfaces* • Investigating Friction and Surfaces • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF	*Mapping Magnetic Fields* • Mapping Magnetic Fields • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Editable Documents - Word (.docx) • Laboratory Technician Guide PDF **2. Forces** • Introduction to Forces • Balanced and Unbalanced Forces • Contact and Non-Contact Forces • Gravity • Planetary Motion **3. Simple Machines** • Levers • Inclined Planes • Wheels, Axles and Pulleys • Gears • How Simple Machines work Together: Bicycle Investigation *Resources continue on the next page*

4. Forces in Action

- The Development of Flight
- How Planes Stay Up

5. Extension

- Calculating Net Force
- Earth's Magnetic Field
- Electrostatic Force
- Gear Ratio
- Newton's Laws of Motion

6. Science Investigations

A Ramp as a Simple Machine

- Pre Lab: A Ramp as a Simple Machine
- Post Lab: A Ramp as a Simple Machine
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Laboratory Technician Guide PDF

Build a Marshmallow Blaster

- Build a Marshmallow Blaster
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Build an Electroscope

- Build an Electroscope
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Levers

- Levers
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

7. Literacy and Numeracy Tasks

- Comprehension: How Planes Stay Up

8. Glossary

- Definitions List: Forces
- Definitions MCQ: Forces
- Spelling List: Forces

9. Topic Test

- Topic Test: Forces

Chemical Sciences

Content Descriptor	EP Lessons in *6. The Particle Theory (AC9S7U05)*	
AC9S7U05 use particle theory to describe the arrangement of particles in a substance, including the motion of and attraction between particles, and relate this to the properties of the substance	**1. Prior Learning** *1. States of Matter* • Introduction to Matter • Solids • Liquids • Gases • Comparing States of Water • Secretive Substances *2. Changing States of Matter* • Melting • Freezing • Boiling • Evaporation • Condensation **2. The Particle Model of Matter** • Introduction to Particles • Particle Model of Matter • States of Matter • Solids • Liquids • Gases **3. Changing States** • Changing States • Temperature and States of Matter • Melting and Freezing • Boiling, Evaporation and Condensation	**4. Properties of Matter** • Mass and Volume • Density • Density and Buoyancy • Heating and Cooling Effects on Volume • Pressure, Compression and Temperature • Diffusion • Viscosity • Viscosity & Newtonian & Non-Newtonian Fluids **5. Extension** • Air Conditioners • Energy In Matter • Extreme Conditions • Gases have Masses? • Heating and Cooling Curves • Melting Polar Ice • Refrigerators and Refrigerants • States of Matter in Space • Sublimation and Deposition • The Water Cycle and Weather • When Water Freezes • Sublimation *Resources continue on the next page*

	6. Science Investigations *Building a Density Tower* • Building a Density Tower • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Building a Steam Engine* • Building a Steam Engine • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Making Ice Cream* • Making Ice Cream • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF	*Observing Atmospheric Pressure* • Observing Atmospheric Pressure • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **7. Literacy and Numeracy Tasks** • Comprehension: What is the Matter? • Comprehension: What is the Matter? **8. Glossary** • Definitions List: The Particle Theory • Definitions MCQ: The Particle Theory • Spelling List: The Particle Theory **9. Topic Test** • Topic Test: Matter
Content Descriptor	**EP Lessons in *7. Mixtures (AC9S7U06)***	
AC9S7U06 use a particle model to describe differences between pure substances and mixtures and apply understanding of properties of substances to separate mixtures	**1. Prior Learning** • Pure and Impure Substances • Mixtures • Solubility • Solvents and Solutes **2. Mixtures and Substances** • Introduction to Mixtures • Pure Substances and Mixtures	**3. Solutions** • Solute and Solvent • Solutions • Concentration • Concentration • Saturation and Line Graphs • Saturation and Line Graphs *Resources continue on the next page*

	4. Separation Techniques • Introduction to Separation • Separating Suspensions • Evaporation • Crystallisation • Chromatography • Distillation • Open-Ended Separation Investigation **5. Separation Around Us** • Separation in Industries • Separation in Food • Water Treatment • Recycling Sewage • Recycling **6. First Nations Australians and Mixtures** • Indigenous Art using Mixtures **7. Extension** • Blood as a Mixture • Magnetic and Electrostatic Separation • Solute, Solvent and Solution • The Zombie Apocalypse Water Shortage • Adsorption • Centrifuging **8. Science Investigations** *Candy Crystals* • Candy Crystals • Post Lab: Candy Crystals • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF	*Chromatography: Separating Colours* • Chromatography: Separating Colours • Post Lab: Chromatography: Separating Colours • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Filtration* • 1a. Pre Lab: Filtration • 1b. Post Lab: Filtration • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Making a Solar Still* • Making a Solar Still • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Separating a Basic Mixture* • Separating a Basic Mixture • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Temperature and Dissolving • Temperature and Dissolving • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **9. Literacy and Numeracy Tasks** • Comprehension: The Cave of the Crystals • Comprehension: The Mystery of Opals	**10. Glossary** • Definitions List: Mixtures • Definitions MCQ: Mixtures • Spelling List: Mixtures **11. Topic Tests** • Topic Test: Identifying Mixtures • Topic Test: Separating Mixtures

Year 8

Biological Sciences

Content Descriptor	EP Lessons in *1. Cells (AC9S8U01)*	
AC9S8U01 recognise cells as the basic units of living things, compare plant and animal cells, and describe the functions of specialised cell structures and organelles	**1. Prior Learning** *1. What is Classification?* • Introduction to Classification • Classification of Life • Living or Non-Living? • MRS GREN **2. Cells** • An Introduction to Cells • Animal Cell Structure • Plant Cell Structure • Animal vs. Plant Cells • Cell Theory **3. Microscopes** • History of Microscopes • Parts and Function of a Microscope • Using a Microscope • Magnification • Size of Cells • Calculating the Size of Cells **4. Extension** • Bacterial Cell Structure • Cell Division in Bacteria • Cell Division in Humans: Meiosis • Cell Division in Humans: Mitosis • Eukaryotic Cells • Fungal Cell Structure	• Prokaryotic Cells • Prokaryotic vs. Eukaryotic • Stem Cell Therapy • Stem Cells ***5. Science Investigations*** *Jelly Cells* • Jelly Cells • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Lab Activity: Pond Critters* • Pond Critters • Risk Assessment (in RiskAssess) • Species Identification Guide PDF • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Lab Activity: Preparing and Observing Cells* • Preparing and Observing Cells • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Using a Microscope 1. Background Information • Parts and Function of a Microscope • Magnification and Resolution • How to Use a Microscope 2. Investigation: Using a Microscope • Using a Microscope • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **6. Literacy and Numeracy Tasks** • Comprehension: The Origin of Mitochondria • Focus on Data: Food Safety and Salmonella • Scientific Writing: Comparing Plant & Animal Cells	**7. Glossary** • Definitions List: Cells • Definitions MCQ: Cells • Spelling List: Cell Organelles • Spelling List: Cells **8. Topic Tests** • Topic Test: Animal and Plant Cells • Topic Test: Plant and Animal Cells + Cells • Topic Test: Cells
Content Descriptor	**EP Lessons in *2. Living Systems (AC9S8U02)***	
AC9S8U02 analyse the relationship between structure and function of cells, tissues and organs in a plant and an animal organ system and explain how these systems enable survival of the individual	**1. Introduction to Body Systems** • Introduction to Body Systems • Organ Systems **2. Digestive System** • Digestive System As A Whole • Mouth and Oesophagus • Stomach and Small Intestine • Large Intestine and Rectum • Comparing Digestion in Other Animals	**3. Respiratory System** • Introduction to the Respiratory System • Breathing • Gas Exchange • Comparing Respiration **4. Circulatory System** • Introduction to the Circulatory System • The Heart • Blood Vessels • Blood *Resources continue on the next page*

	5. Excretory System • Introduction to Excretory System • Excretory Organs • The Kidneys & Urine Production • Kidney Disease **6. Musculoskeletal System** • Introduction to the Musculoskeletal System • Bones & Joints • Muscles **7. Plant Systems** • Plant Systems • Xylem and Phloem **8. Organ Transplants** • Organ Transplants • Ethical Issues of Organ Transplants • Ctrl + X, Ctrl + V: Xenotransplants **9. Extension** • Asexual Reproduction in Plants • Food Groups • Plant Cloning • Seed Dispersal & Germination • Sexual Reproduction in Plants • Stress Effects on the Body • The Microbes That Control What We Do • Trapped in a Cave • Injuries • Photosynthesis • Pollination	**10. Science Investigations** *Kidney Dissection* • Kidney Dissection • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Cross Pollination* • Cross Pollination • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF *First Aid and Body Systems* • First Aid and Body Systems • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF *Flower Dissection* • Flower Dissection • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Revision: Using a Microscope *Heart Dissection* • Heart Dissection • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	11. Literacy and Numeracy Tasks • Comprehension: Ancient Anatomy • Focus on Data: Relative Heart Size **12. Glossary** • Definitions List: Reproductive System • Definitions List: Spelling - Body Systems • Definitions MCQ: Body Systems • Definitions MCQ: Reproductive System • Spelling List: Animal Reproductive Systems • Spelling List: Body Systems	**13. Topic Tests** • Body Systems (32 marks) • Digestive System • Respiratory System

Earth and Space Sciences

Content Descriptor	EP Lessons in *3. Earth's Tectonic Activity (AC9S8U03)*	
AC9S8U03 investigate tectonic activity including the formation of geological features at divergent, convergent and transform plate boundaries and describe the scientific evidence for the theory of plate tectonics	**1. Prior Learning** • Earth's Structure • Mechanical Layers of the Earth • The Geosphere **2. Plate Tectonics** • Plate Tectonics • Plate Boundaries • Faults • Plate Tectonics • Plate Boundaries • Faults **3. Earthquakes and Volcanoes** • Introduction to Earthquakes • Earthquake Hazards • Measuring Earthquakes • Introduction to Volcanoes • Volcanic Eruptions • Living with Volcanoes • Understanding Megaquakes • Predicting Earthquakes and Tsunamis **4. Development of the Theory of Plate Tectonics** • Wegener's Theory of Continental Drift • Supercontinents • Seafloor Spreading & Magnetic Striping **5. Extension** • Causes of Tsunamis • Developing the Geological Timescale • Disaster Recovery Robots	• Dissecting the Earth • Earth's Magnetic Field • Relief Bots • Tsunami Hazards • Types of Lava • Volcano Exploration Robots • Volcanic Hazards • Tsunamis **6. Science Investigations** *Build a Seismometer* • Build a Seismometer • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Deep Time and Plate Tectonics* • Deep Time and Plate Tectonics • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *The Hotspot Debate* • The Hotspot Debate • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	7. Literacy and Numeracy Tasks • Comprehension: Ice Tectonics on Europa • Comprehension: Subduction Zones and Ophiolite Belts • Scientific Writing: The Time Traveller's Holiday Guide!	**8. Glossary** • Definitions List: Earth's Tectonic Activity • Definitions MCQ: Earth's Tectonic Activity • Spelling List: Earth's Tectonic Activity **9. Topic Tests** • Topic Test - Extreme Natural Events • Topic Test - Plate Tectonics • Topic Test - Volcanoes and Earthquakes
Content Descriptor	**EP Lessons in *4. Rocks & Fossils (AC9S8U04)***	
AC9S8U04 describe the key processes of the rock cycle, including the timescales over which they occur, and examine how the properties of sedimentary, igneous and metamorphic rocks reflect their formation and influence their use	**1. Prior Learning** • Weathering • Erosion and Sedimentation • Australian Landforms formed by Physical Weathering, Erosion and Sedimentation • Australian Landforms formed by Volcanism and Chemical Weathering **2. Rocks** • The Rock Cycle • Sedimentary Rocks • Igneous Rocks • Metamorphic Rocks • Rock Density **3. Fossils** • Fossils • Australian Fossils • The Geological Timescale • Correlating Rocks	**4. Minerals & Mining** • Introduction to Minerals • Identifying Minerals • Minerals and Rocks as Resources • Mining and Mineral Exploration **5. Extension** • Feathery Dinosaurs • Martian Geology • Volcanology **6. Science Investigations** *Build a Geological Timescale* • Build a Geological Timescale • Student Worksheet PDF • Laboratory Technician Guide PDF • Teacher Guide PDF *Resources continue on the next page*

	Cooling Crystals • Cooling Crystals • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Simulating Erosion* • Simulating Erosion • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF	**7. Literacy and Numeracy Tasks** • Comprehension: Baked Rocks in the Lachlan Fold Belt • Comprehension: Hot Rocks of the Cosgrove Hotspot Track • Comprehension: Zircons are Forever **8. Glossary** • Definitions MCQ: Introduction to Geology • Definitions MCQ: Rocks & Fossils • Spelling List: Introduction to Geology • Spelling List: Rocks & Fossils **9. Topic Tests** • Topic Test: Earth Processes • Topic Test: Minerals and Rocks

Physical Sciences

Content Descriptor	EP Lessons in *5. Energy & Energy Transfer (AC9S8U05)*	
AC9S8U05 classify different types of energy as kinetic or potential and investigate energy transfer and transformations in simple systems	**1. Prior Learning** • Electricity • Where Electricity Comes From • Circuitry • Open and Closed Circuits • Circuit Diagrams • Conductors • Insulators **2. Energy and Units of Energy** • What is Energy? • Kinetic Energy • Potential Energy • Identifying Kinetic or Potential Energy	**3. Energy Transfer and Transformation** • Law of Conservation of Energy • Energy Transformations • Displaying Energy Transformations • Energy Transformations and Efficiency • Energy Transformations in Power Plants • Energy Transformation in Cars • Energy Transformation and Food **4. Heat Energy** • Introduction to Heat Transfer *Resources continue on the next page*

5. Electrical Energy

- What is Electricity?
- Electricity Generation & Transformations
- Circuits

6. Extension

- Cogeneration and Engines
- Energy Efficient Houses
- Heat Production
- Reducing Energy Consumption
- The Development of Flight
- Units of Energy
- Batteries

7. Science Investigations

Bouncy Balls and Energy Efficiency

- Bouncy Balls and Energy Efficiency
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Building a Solar Oven

- Building a Solar Oven
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Energy in Skate Parks

- Energy in Skate Parks
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF

Energy Transformations

- Energy Transformations
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Investigating Heat Energy

- Investigating Heat Energy
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Rube Goldberg Machines

- Rube Goldberg Machines
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

8. Literacy and Numeracy Tasks

- Converting between Joules (J) & Kilojoules (kJ)
- Converting between Kilojoules (kJ) & Megajoules (MJ)
- Data Interpretation: Energy Calculations
- Qualitative and Quantitative Data

9. Glossary

- Definitions List: Energy & Energy Transfer
- Definitions MCQ: Energy & Energy Transfer
- Spelling List: Energy & Energy Transfer

Chemical Sciences

Content Descriptor	EP Lessons in *6. Classifying Matter (AC9S8U06)*	
AC9S8U06 classify matter as elements, compounds or mixtures and compare different representations of these, including 2-dimensional and 3-dimensional models, symbols for elements and formulas for molecules and compounds	**1. Prior Learning** *1. Mixtures and Substances* • Introduction to Mixtures • Pure and Impure Substances • Graphs and Tables of Mixtures *2. Solutions* • Solutions • Concentration • Saturation and Line Graphs **2. Elements, Compounds & Molecules** • Introduction to Elements, Compounds and Mixtures • Elements • Compounds • Molecules • Chemical Formulas • First 10 Elements **3. Classifying Mixtures** • Suspensions • Colloids • Emulsions **4. The History of the Periodic Table** • Why did we need a Periodic Table in the first place? • Discovering Elements **5. Extension** • Carbon Chemistry • Chemical Bonding	• Constructing Molecular Models • Elements and Compounds in Household Products • Identifying Metals, Nonmetals and Metalloids • Marie Curie and Radioactivity • Materials Science • Metals, Non-Metals and Metalloids • Properties and Uses of Everyday Elements and Compounds **6. Science Investigations** *Making Models* • 1a. Pre Lab: Making Models • 1b. Post Lab: Making Models • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **7. Literacy and Numeracy Tasks** • Comprehension: Cosmetics and Chemistry: A Historical Perspective **8. Glossary** • Definitions List: Classifying Matter • Definitions MCQ: Classifying Matter • Spelling List: Classifying Matter **9. Topic Tests** • Topic Test: Elements, Compounds and Molecules (40 marks)

Content Descriptor	EP Lessons in *7. Chemical Changes (AC9S8U07)*	
AC9S8U07 compare physical and chemical changes and identify indicators of energy change in chemical reactions	**1. Prior Learning** • Physical Changes and Reversible Reactions • Irreversible Reactions • Cooking and Burning • Rusting • Recycling Metal • Recycling Plastic • Recycling Glass **2. Physical Properties & Changes** • Physical Change • Physical Properties • Physical Properties of Metals and Non-Metals **3. Chemical Properties & Changes** • Chemical Properties • Chemical Changes • Chemical Reactions • Identifying Physical and Chemical Changes **4. Chemical Compounds, Properties and Transformations** • Using Substances Based on their Properties • Properties and Uses of Metals • Synthetic Materials and Their Uses • Chemicals: Friend or Foe? • Helium: More Than a Bit of Squeaky Fun	**5. Extension** • A Day in the Life of an Industrial Chemist • Radioactivity in Industry • Radioactivity in Medicine • Working In Chemistry • Writing Symbol Equations • Writing Word Reactions • Alchemy • Recycling **6. Science Investigations** *Fire and Reactions* • Combustion Reactions • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Identifying Chemical Reactions* • Identifying Chemical Reactions • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Observing Chemical Reactions* • Observing Chemical Reactions • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Rusting In Different Environments • Rusting in Different Environments • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **7. Literacy and Numeracy Tasks** • Comprehension: By Our Powers Combined	**8. Glossary** • Definitions List: Chemical Changes • Definitions MCQ: Chemical Changes • Spelling List: Chemical Changes **9. Topic Test** • Topic Test: Physical and Chemical Changes

Year 9

Biological Sciences

Content Descriptor	EP Lessons in *1. Responding to Stimuli (AC9S9U01)*	
AC9S9U01 compare the role of body systems in regulating and coordinating the body's response to a stimulus, and describe the operation of a negative feedback mechanism	**1. Prior Learning** • Introduction to Body Systems • Levels of Organisation • Organ Systems • Specialised Animal Cells: Muscle and Nerve Cells • Specialised Animal Cells II **2. Homeostasis** • Basics of Homeostasis • Homeostatic Terms **3. The Nervous System** • Introduction To The Nervous System • Nerves and Neurons • Central and Peripheral Nervous System • Sympathetic and Parasympathetic Nervous System • Nerve Pathways **4. The Endocrine System** • Introduction to the Endocrine System • Glands of the Endocrine System • Hormones of the Endocrine System **5. Responding to Stimuli** • Control Systems - Nervous vs Endocrine • Sensory Organs • The Eye	**6. Feedback Mechanisms** • Stimulus-Response Model • Negative and Positive Feedback • Regulating Blood Sugar • Modelling Human Thermoregulation • Endocrine Diseases **7. Extension** • From Zero to Hero! Honey Bee Mathematicians • Starfish Nervous System • Use of Hormones in the Dairy Industry **8. Science Investigations** *Testing Reflexes* • Testing Reflexes • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **9. Literacy and Numeracy Tasks** • Data Interpretation: Body Temperature • Data Interpretation: Regulating Blood Glucose Levels *Resources continue on the next page*

	10. Glossary • Definitions List: Responding to Stimuli • Definitions MCQ: Responding to Stimuli • Spelling List: Responding to Stimuli	**11. Topic Tests** • Topic Test: Homeostatic Concepts • Topic Test: The Nervous System
Content Descriptor	**EP Lessons in *2. Reproduction (AC9S9U02) (AC9S8U02)***	
AC9S9U02 describe the form and function of reproductive cells and organs in animals and plants, and analyse how the processes of sexual and asexual reproduction enable survival of the species	**1. Prior Learning** • An Introduction to Cells • Size of Cells • Eukaryotic Cells • Prokaryotic Cells • Prokaryotic vs. Eukaryotic • Animal Cell Structure • Plant Cell Structure • Animal vs. Plant Cells • Bacterial Cell Structure • Fungal Cell Structure **2. Sexual Reproduction** • Sexual Reproduction • Female Reproduction • Male Reproduction **3. Asexual Reproduction** • Asexual Reproduction • Asexual Reproduction in Plants • Seed Dispersal & Germination **4. Extension** • Labour & Birth • Lamb in a Bag • Plant Cloning	• Contraception • Pregnancy • Puberty **5. Science Investigations** *Cross Pollination* • Cross Pollination • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF *Flower Dissection* • Flower Dissection • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF • Revision: Using a Microscope **6. Glossary** • Definitions List: Reproduction • Definitions MCQ: Reproduction • Spelling List: Reproduction

Earth and Space Sciences

Content Descriptor	EP Lessons in *3. The Carbon Cycle & Earth's Spheres (AC9S9U03)*	
AC9S9U03 represent the carbon cycle and examine how key processes including combustion, photosynthesis and respiration rely on interactions between Earth's spheres (the geosphere, biosphere, hydrosphere and atmosphere)	**1. The Earth as a System** • Spheres • The Biosphere and Biomes • Water Cycle • Water on Earth **2. The Carbon Cycle** • The Carbon Cycle • Photosynthesis • Respiration • Combustion Reactions • Carbon Capture • Carbon Footprints **3. The Greenhouse Effect** • The Greenhouse Effect • The Enhanced Greenhouse Effect • Human Influences on Climate • CFCs and the Ozone Layer • Effects: Temperature • Computer Modelling and the Environment • Research Activity - Climate Change **4. Extension** • Climate and Weather • El Niño and La Niña • Effects of Climate Change on Biodiversity • Ocean Currents • Reclaiming our Climate	**5. Science Investigations** *Climate Change* • Climate Change • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Polar Ice* • Polar Ice • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *The Greenhouse Effect* • The Greenhouse Effect • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **6. Literacy and Numeracy Tasks** • Comprehension: Effects of Climate Change on Biodiversity • Comprehension: If Climate Change is Real, How Come…? *Resources continue on the next page*

	• Comprehension: Troubled Waters • Data Interpretation: Examining Past Climate • Data Interpretation: The Southern Oscillation Index • Scientific Writing: Arguing For or Against Climate Change	**7. Glossary** • Definitions List: The Carbon Cycle & Earth's Spheres • Definitions MCQ: The Carbon Cycle & Earth's Spheres • Spelling List: The Carbon Cycle & Earth's Spheres **8. Topic Tests** • Climate Change • Global Cycles

Physical Sciences

Content Descriptor	EP Lessons in *4. Waves and Energy Transfer (AC9S9U04)*	
AC9S9U04 use wave and particle models to describe energy transfer through different mediums and examine the usefulness of each model for explaining phenomena	**1. Prior Learning** • What is Energy? • Identifying KE or PE • Law of Conservation of Energy • Introduction to Heat Transfer • Conductors and Insulators • What is Electricity? • Where Electricity Comes From • Circuitry • Open and Closed Circuits • Circuit Diagrams • Light • The Movement of Light • The Speed of Light **2. Heat Transfer** • Heat Transfer • Conductors and Insulators • Convection	• Radiation • Conduction • Harnessing Fire in Australia **3. Sound Energy** • Sound Waves • Sound Formation • Pitch and Loudness • Australian Aboriginal Music **4. Electricity** • Electricity • Circuits • Circuits in Parallel • Circuits in Series • Comparing Circuits • Conductors and Insulators *Resources continue on the next page*

	• Current • Voltage • Resistance • Introduction to Ohm's Law • Calculating Using Ohm's Law • Batteries **5. Light** • Light as a Wave • Plane Mirrors and Reflection • Curved Mirrors • Refraction • Lenses • Drawing Ray Diagrams • Refractive Index • Total Internal Reflection • Light: Summary **6. Other forms of Electromagnetic Radiation** • The Electromagnetic Spectrum • Radio Waves • You, Me and UV • X-rays • Radar • Mobile Phones - Radio Waves and Microwaves • Electromagnetic Radiation and Medicine • Internet **7. Extension** • Bionic Ears • Household Circuits and Electrical Safety • Housing Insulation • Snell's Law • The Cosmic Microwave Background	• The Sixth Sense: Electroreception • Turned Down for What: Workplace Noise • War of the Currents • Ways in which the Use of Electricity by Society has Changed Over Time • Bushfires • Colour • Materials **8. Science Investigations** *Electricity* Building Circuits • Building Circuits • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF Ohm's Law • Ohm's Law • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF Resistance • Resistance • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Static Electricity • Static Electricity • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Heat Transfer* Convection in Liquids • Convection in Liquids • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF Heat Conduction • Heat Conduction • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF Insulators • Insulators • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF	Radiation • Radiation • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Light* Law of Reflection • Law of Reflection • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF Lenses • Lenses • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF Refraction • Refraction • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Sound Energy Slinky Waves • Slinky Waves • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF Speed of Sound • Speed of Sound • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **9. Literacy and Numeracy Tasks** • Comprehension: Development of Light Bulbs • Comprehension: Heat Transfer in the Atmosphere and the Oceans • Comprehension: History of Radio Communication • Comprehension: Ultrasound • Focus on Data: The Speed of Heat Transfer	**10. Glossary** • Definitions List: Communication with Waves • Definitions List: Electricity • Definitions List: Heat • Definitions List: Light • Definitions List: Sound • Definitions MCQ: Communication with Waves • Definitions MCQ: Electricity • Definitions MCQ: Heat • Definitions MCQ: Light • Definitions MCQ: Sound • Spelling List: Communication With Waves • Spelling List: Electricity • Spelling List: Heat • Spelling List: Light • Spelling List: Sound **11. Topic Tests** • Topic Test: Light

Content Descriptor	EP Lessons in *5. Conservation of Energy (AC9S9U05)*	
AC9S9U05 apply the law of conservation of energy to analyse system efficiency in terms of energy inputs, outputs, transfers and transformations	**1. Prior Learning** • Types of Energy • Kinetic Energy • Gravitational Potential Energy **2. Conservation of Energy** • Conservation of Energy • Energy Transfer • Energy Transformations • Energy, Work, and Power **3. Energy Efficiency** • Useful and Wasted Energy • Energy Calculations • Energy Efficiency • Calculating Energy Efficiency • Sports Science • Energy Efficiency and Public Transport **4. Electricity Generation** • Introduction to Electricity Generation • Electricity Generation In Australia • Wind Turbines • Hydroelectricity and the Balkan Dam Controversy • Geothermal Energy **5. Extension** • Cars of the Future • Cogeneration and Engines • Energy in Food • Energy Transformation and Food • Levitation at UChicago! • Steam Engines	**6. Science Investigations** *Energy Efficiency of Bouncy Balls* • Energy Efficiency of Bouncy Balls • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Energy in Skate Parks* • Energy in Skate Parks • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF *Roller Coasters* • Roller Coasters • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Investigating Work in Everyday Activities* • Investigating Work in Everyday Activities **7. Literacy and Numeracy Tasks** • Comprehension: Energy in Rockets **8. Glossary** • Definitions List: Conservation of Energy • Definitions MCQ: Conservation of Energy • Spelling List: Conservation of Energy

Chemical Sciences

Content Descriptor	EP Lessons in *6. Atoms and Radioactivity (AC9S9U06)*	
AC9S9U06 explain how the model of the atom changed following the discovery of electrons, protons and neutrons and describe how natural radioactive decay results in stable atoms	**1. Prior Learning** • Introduction to Elements, Compounds and Mixtures • Atoms • Elements • Metals, Non-Metals and Metalloids **2. Atomic Structure** • Atoms, Pure Substances and Mixtures • The Structure of an Atom • Atomic Symbols • Models of the Atom **3. Ions and Isotopes** • Introduction to Ions • Electron Configuration of Ions • Ionic Compounds • Naming Ionic Compounds • What are Isotopes? **4. Radioactivity** • What is Radioactivity? • Types of Radiation • Properties of Radiation • Half-Lives • Radioactivity in Industry • Radioactivity in Medicine • Effects of Radiation on Humans **5. Extension** • Marie Curie and Radioactivity • Nuclear Bombs • Nuclear Fission	• Nuclear Power • Polyatomic Ions and Compounds • Writing Nuclear Equations **6. Science Investigations** *Build an Atom* • Build an Atom • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Skittle Half Lives* • Skittle Half-Lives • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **7. Literacy and Numeracy Tasks** • Comprehension: The Cave of the Crystals • Comprehension: Watching Paint Dry • Data Interpretation: Name That Radiation! **8. Glossary** • Definitions List: Atoms and Radioactivity • Definitions MCQ: Atoms and Radioactivity • Spelling List: Atoms and Radioactivity **9. Topic Tests** • Atoms & The Periodic Table with Radioactivity

Content Descriptor	EP Lessons in *7. Chemical Reactions (AC9S9U07)*	
AC9S9U07 model the rearrangement of atoms in chemical reactions using a range of representations, including word and simple balanced chemical equations, and use these to demonstrate the law of conservation of mass	**1. Prior Learning** • Physical Properties • Physical Change • Chemical Properties • Chemical Changes • Chemical Reactions • Writing Word Reactions **2. Chemical Reactions** • Introduction to Chemical Reactions • Reactants and Products • Writing Word Equations • Constructing Molecular Models **3. Conservation of Mass** • Conservation of Mass - Basic • Breaking the Law (of Conservation of Mass)? • Conservation of Mass - Advanced • Breaking the Law (of Conservation of Mass)? **4. Balancing Equations** • Chemical Reactions and Equations • Balancing Equations **5. Green Chemistry** • Waste Management • Combustion and the Environment • Fuels and Pharmaceuticals • Alternate Fuels	**6. Extension** • Balancing Chemical Equations • Reactants and Products & Spontaneous vs Non-Spontaneous Reactions • Writing Chemical and Molecular Equations • Writing Chemical Equations 1 • Writing Chemical Equations 2 **7. Science Investigations** *Conservation of Mass* • Conservation of Mass • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Identifying Chemical Reactions* • Identifying Chemical Reactions • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Marshmolecules • Marshmolecules • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **8. Literacy and Numeracy Tasks** • Comprehension: Chemical Clocks • Comprehension: Chemistry: Glorified Baking? • Data Interpretation: Identifying Chemical Reactions	**9. Glossary** • Definitions List: Chemical Reactions • Definitions MCQ: Chemical Reactions • Spelling List: Chemical Reactions **10. Topic Tests** • Chemical Reactions Basics • Writing Chemical Equations

Year 10

Biological Sciences

Content Descriptor	EP Lessons in *1. Genetics (AC9S10U01)*	
AC9S10U01 explain the role of meiosis and mitosis and the function of chromosomes, DNA and genes in heredity and predict patterns of Mendelian inheritance	**1. Prior Learning** • Mitosis **2. DNA the Molecule** • Discovering the Double Helix • Basics of DNA • Structure of DNA • Nitrogenous Bases **3. Genes and Chromosomes** • Genes and Genetic Information • Homologous Chromosomes • Sex Chromosomes **4. Cell Division** • Meiosis • Mitosis vs. Meiosis • DNA Replication • Gametes and Fertilisation • Asexual and Sexual Reproduction **5. Inheritance** • The History of Genetic Thought • Mendel • Alleles • Dominant/Recessive Interactions • Inheriting Alleles and Punnett Squares • Making Punnett Squares • Pedigrees	**6. Mutations** • Mutations • Mutations and Mutagens • Chromosomal Abnormalities • Genetic Diseases • Cancer **7. Extension** • Incomplete Dominance • Sex Linkage • Sex Linkage, Punnett Squares and Pedigrees • The Ethics of Genetics • The Knotty New DNA Structure! • Codominance • Proteins **8. Science Investigations** *Extracting DNA* • Extracting DNA • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Modelling Inheritance of Alleles • Modelling Inheritance of Alleles • Risk Assessment (in RiskAssess) • Allele Card Handout PDF • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Observing Mitosis* • Observing Mitosis • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Researching Inbreeding in Dogs* • Background Information - The Consequences of Inbreeding • Research Project - Inbreeding in Dogs • Student Worksheet PDF • Teacher Guide PDF	**9. Literacy and Numeracy Tasks** • Comprehension: Attraction: It's all in the Armpits • Comprehension: Epigenetics: Inheritance is Strange • Data Interpretation: DNA Fingerprinting: Thirsty Thievery • Data Interpretation: The Blue People of Troublesome Creek **10. Glossary** • Definitions List: Genetics • Definitions MCQ: Genetics • Spelling List: Genetics **11. Topic Tests** • Topic Test: Cell Division • Topic Test: DNA, Genes, and Chromosomes
Content Descriptor	**EP Lessons in *2. Evolution (AC9S10U02)***	
AC9S10U02 use the theory of evolution by natural selection to explain past and present diversity and analyse the scientific evidence supporting the theory	**1. Prior Learning** • Introduction to Adaptations • Adaptations in Shape or Form • Adaptations in Behaviour • Adaptations Inside the Body • Nocturnal Activity • Camouflage • Life at the Poles • Life in a Rock Pool • Life in the Desert • Dune Plants	**2. The Theory of Evolution** • The History of Evolutionary Thought • Darwin's Theory of Evolution • Theories and Evidence of Evolution • Geological Time **3. Mechanisms of Evolution** • Mechanisms of Evolution • Biodiversity • Extinction

4. Evidence for Evolution

- Fossils and the Fossil Record
- Evidence from Living Species
- Geographical Distribution
- The Wallace Line

5. Human Evolution

- Our Evolution
- Rewriting Human History

6. Extension

- Adaptations: Mimicry
- Evolution: Sexual Selection
- Feathery Dinosaurs
- The Science of Puppy Dog Eyes
- Coevolution

7. Science Investigations

Assessing Biodiversity

- Assessing Biodiversity
- Risk Assessment (in RiskAssess)
- Invertebrate Guide PDF
- Lab Report Material PDF
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Building an Evolutionary Timeline

- Building an Evolutionary Timeline
- Timeline Guide PDF
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Great Ape Genealogy

- Great Ape Genealogy
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Survival of the Mutants

- Survival of the Mutants
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

8. Literacy and Numeracy Tasks

- Comprehension: Evolution and Extinction
- Comprehension: The Ancestor of All Things
- Data Interpretation: Natural Selection in Action!
- Data Interpretation: The Biodiversity Gradient

9. Glossary

- Definitions List: Evolution
- Definitions MCQ: Evolution
- Spelling List: Evolution

10. Topic Tests

- Topic Test: The Evidence for Evolution
- Topic Test: The Mechanisms of Evolution

Earth and Space Sciences

Content Descriptor	EP Lessons in *3. The Universe (AC9S10U03)*	
AC9S10U03 describe how the big bang theory models the origin and evolution of the universe and analyse the supporting evidence for the theory	**1. Prior Learning** • Introduction to the Solar System • The Sun • Distances in Space • Sizes in Space • Models of the Solar System • Telescopes **2. The Universe** • The Solar System and Beyond • Models of the Solar System • Scientific Theory • Scientific Notation • Indigenous Australian Constellations **3. Measuring the Universe** • Distances in Space • Observing Space • Gravity and the Cosmological Principle • Light Speed and Light Years • Seconds and Years • Converting Light Years **4. Stars and Galaxies** • The Life Cycle of Stars • Properties of Stars • Calculating Distance to Stars • Parallax and Distances Between Stars • Distances to Stars and Parsecs • Reading Hertzsprung-Russell Diagrams	**5. The Big Bang Theory** • The Big Bang Theory • End of the Universe • The Big Bang Theory vs. Steady State Theory • The Cosmic Microwave Background • Red Shift **6. Extension** • Radar Ranging • The Secret Lives of Ultra-Cool Dwarf Stars • Relativity **7. Science Investigations** *Flame Tests* • Flame Tests • Pre Lab: Flame Test • Post Lab: Flame Test • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Measuring Parallax* • Measuring Parallax • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	8. Literacy and Numeracy Tasks • Comprehension: Black Holes • Data Interpretation: Redshift and the Expanding Universe **9. Glossary** • Definitions List: The Universe • Definitions MCQ: The Universe • Spelling List: The Universe	**10. Topic Tests** • Topic Test: Measuring the Universe • Topic Test: Measuring the Universe
Content Descriptor	**EP Lessons in *4. Global Systems (AC9S10U04)***	
AC9S10U04 use models of energy flow between the geosphere, biosphere, hydrosphere and atmosphere to explain patterns of global climate change	**1. Prior Learning** • Water on Earth • Water Cycle • The Biosphere and Biomes **2. Spheres and Global Cycles** • Spheres • Water Cycle • Influences on the Water Cycle • The Carbon Cycle • Carbon Capture • The Nitrogen Cycle • Phosphorus Cycle **3. A Changing Climate** • Climate and Weather • The Greenhouse Effect • The Enhanced Greenhouse Effect • Human Influences on Climate • El Niño and La Niña • Ocean Currents • CFCs and the Ozone Layer • Examining Past Climate • Computer Modelling and the Environment	**4. The Effects of Climate Changes** • Effects of Climate Change on Biodiversity • Effects: Temperature • Disappearing Polar Ice • Where Have all the Turtles Gone? • Pollution **5. Reclaiming Our Climate** • Carbon Footprints • Save the Great Barrier Reef! • Alternate Fuels • If Climate Change is Real, How Come…? • STEM: Alternate Fuels **6. Extension** • Apocalypse Now: Natural Disasters • Carbon Capture *Resources continue on the next page*

	7. Science Investigations *Climate Change* • Climate Change • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Convection Currents* • Convection Currents • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Polar Ice* • Polar Ice • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *The Greenhouse Effect* • The Greenhouse Effect • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF	**8. Literacy and Numeracy Tasks** • Comprehension: Cloudy with a Chance of Hamburgers • Comprehension: Troubled Waters • Data Interpretation: Reading a Weather Map • Data Interpretation: The Southern Oscillation Index **9. Glossary** • Definitions List: Global Systems • Definitions MCQ: Global Systems • Spelling List: Global Systems **10. Topic Tests** • Topic Test: Climate Change • Topic Test: Global Cycles

Physical Sciences

Content Descriptor	EP Lessons in *5. Force and Motion (AC9S10U05)*	
AC9S10U05 investigate Newton's laws of motion and quantitatively analyse the relationship between force, mass and acceleration of objects	**1. Prior Learning** • What are Forces? • Contact and Non-Contact Forces • Balanced and Unbalanced Forces • Drawing Forces • Friction **2. Motion** • Distance and Time • Displacement and Compass Directions • Calculating Displacement • Speed **3. Graphing Motion** • Distance-Time Graphs • Displacement-Time Graphs • Velocity-Time Graphs • Acceleration-Time Graphs • Summary of Motion Graphs **4. Newton's Laws of Motion** • Newton's First Law • Newton's Second Law • Newton's Third Law • Car Safety Systems • Car Safety Systems Investigation • Sports Science **5. Extension** • How BB-8 Works • Maglev Trains • Planetary Motion • Rockets	• Acceleration • Using the Acceleration Formula to Calculate Final Velocity • Using the Acceleration Formula to Calculate Initial Velocity • Using the Acceleration Formula to Calculate Time • Ancient Tools and Weapons **6. Science Investigations** *Balloon Rocket* • Balloon Rocket • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Egg Drop* • Egg Drop • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	Reaction Times • Reaction Times • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Ticker Timers* • Ticker Timers • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Truckapults* • Truckapults • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF **7. Literacy and Numeracy Tasks** • Comprehension: Crashing Drones • Comprehension: History of Rockets • Comprehension: How Planes Stay Up • Data Interpretation: Graphing and Analysing Motion • Data Interpretation: Space Travel: The Weight Loss Sensation!	**8. Glossary** • Definitions List: Force and Motion • Definitions MCQ: Force and Motion • Spelling List: Force and Motion **9. Topic Tests** • Topic Test: Motion

Chemical Sciences

Content Descriptor	EP Lessons in *6. Atoms and the Periodic Table (AC9S10U06)*	
AC9S10U06 explain how the structure and properties of atoms relate to the organisation of the elements in the periodic table	**1. Prior Learning** • What are Atoms, Elements and Compounds? • The Structure of an Atom • Atoms, Pure Substances and Mixtures • Models of the Atom • Atomic Symbols **2 .The Structure of Atoms** • The Structure of an Atom • History of the Atomic Model • Electron Configuration • Flame Tests • Spectroscopy **3. The Periodic Table** • Overview: The Periodic Table • Atomic Symbols • Group 1 (The Alkali Metals) & Group 2 (The Alkaline Earth Metals) • Group 14—The Carbon Group • Group 17—The Halogens • Group 18 - The Noble Gases • Other Groups • Trends in the Periodic Table • Designing the Periodic TableWhat's with the middle and bottom of the Periodic Table? • Quiz- First 20 Elements (Name to Symbol) • Quiz- First 20 Elements (Symbol to Name)	**4. Metals and Non-Metals** • Metals, Non-Metals and Metalloids • Physical Properties of Metals • Chemical Properties of Metals • Overview of Metal Properties • Metals in the Periodic Table • Metallic Bonding • Overview of Metal Reactions **5. Extension** • Alloys and Their Uses • Chemicals: Friend or Foe? **6. Science Investigations** *Flame Test* • Pre Lab: Flame Test • Post Lab: Flame Test • Risk Assessment (in RiskAssess) • Student Worksheet PDF • Lab Report Material PDF • Teacher Guide PDF • Laboratory Technician Guide PDF *Resources continue on the next page*

	7. Literacy and Numeracy Tasks • Comprehension: Helium: More Than a Bit of Squeaky Fun • Comprehension: Metallic Hydrogen or: How I Learned to Stop Worrying and Love the Scientific Process • Data Interpretation: Understanding the Periodic Table	**8. Glossary** • Definitions List: Atoms and the Periodic Table • Definitions MCQ: Atoms and the Periodic Table • Spelling List: Atoms and the Periodic Table
Content Descriptor	**EP Lessons in *7. Chemical Reactions and Reaction Rates (AC9S10U07)***	
AC9S10U07 identify patterns in synthesis, decomposition and displacement reactions and investigate the factors that affect reaction rates	**1. Prior Learning** • Conservation of Mass • Writing Word Reactions • Balancing Equations **2. Types of Chemical Reactions** • Chemical vs. Physical • Chemical Reactions • Types of Chemical Reactions • Combination and Decomposition Reactions • Neutralisation Reactions • Reaction in Action: Baking Soda and Vinegar • Acid-Metal Reactions • Metal Displacement Reactions • Metal Reactions with Oxygen **3. Reactions Around Us** • Fermentation • Waste Management • Oxidation and Reduction • Analysing Chemical Reactions in Production Processes	**4. Rates of Reaction** • Rate of Reaction • Agitation, Concentration and Surface Area • Activation Energy, Temperature and Catalysts • Overview: Factors Affecting Reaction Rates • Graphing Rate of Reaction **5. Creating with Chemistry** • Analytical Chemistry • Fuels and Pharmaceuticals • Polymers **6. Extension** • Collision Theory • Collision Theory and Rate of Reaction • Empirical and Molecular Formulae • Metal Reactions with Acid • Metal Reactions with Water • Moles and Equations • Rate of Reaction Equations • Reaction Equations • The Mole *Resources continue on the next page*

7. Science Investigations

Acids and Metals

- Acids and Metals
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Identifying Chemical Reactions

- Identifying Chemical Reactions
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Lab Report Material PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Milk Plastic

- Milk Plastic
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Modelling Rate of Reaction: Concentration

- Modelling Rate of Reaction: Concentration
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

Modelling Rate of Reaction: Temperature

- Modelling Rate of Reaction: Temperature
- Risk Assessment (in RiskAssess)
- Student Worksheet PDF
- Teacher Guide PDF
- Laboratory Technician Guide PDF

8. Literacy and Numeracy Tasks

- Comprehension: Acids and Bases
- Comprehension: Chemical Clocks
- Comprehension: Chemistry: Glorified Baking?
- Data Interpretation: Breaking the Law (of Conservation of Mass)?
- Data Interpretation: Identifying Chemical Reactions

9. Glossary

- Definitions List: Balancing Equations
- Definitions List: Chemical Reactions and Rates of Reaction
- Definitions MCQ: Balancing Equations
- Definitions MCQ: Chemical Reactions and Rates of Reaction
- Spelling List: Balancing Equations
- Spelling List: Chemical Reactions and Rates of Reaction

10. Topic Tests

- Chemical Reactions Revision
- Topic Test: Chemical Reactions Basics
- Topic Test: Types of Chemical Reaction
- Topic Test: Writing Chemical Equations