



NZC Science

EP Curriculum Map

Level 3

Living world

Topics	Lesson Names
Recognise that there are life processes common to all living things and that these occur in different ways.	<i>Living and Non-Living Things</i> <ul style="list-style-type: none">• Living and Non-Living Things• Environments• Plants and their Environment• Animals and their Environment• Extreme Environments• Fungi and their Environment• Extreme Environments: The Alpine Zone
Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.	<i>Adaptations and Ecosystems</i> <ul style="list-style-type: none">• Introduction to Adaptations• Adaptations in Shape or Form• Rock Pool Environments• Adaptations Inside the Body• Adaptations in Behaviour• Desert Environments• Nocturnal Activity• Camouflage <i>New Zealand Ecology</i> <ul style="list-style-type: none">• Land of the Long White Cloud• NZ Birds, Bats and Beetles• Looking after our Native Species
Begin to group plants, animals, and other living things into science-based classifications. Explore how the groups of living things we have in the world have changed over long periods of time and appreciate that some living things in New Zealand are quite different from living things in other areas of the world.	<i>Classification</i> <ul style="list-style-type: none">• Uses of Classification• Classification of Life• Introduction to Classification <i>Genetics and Evolution of NZ Species</i> <ul style="list-style-type: none">• What is Evolution?• Evolution of New Zealand Animals• Evolution of New Zealand Plants



Planet Earth and beyond

Topics	Lesson Names
Appreciate that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.	<ul style="list-style-type: none">● Introduction to Earth's Resources● Renewable and Non-Renewable Energy Sources● Living Things as a Resource● Air as a Resource● Wind as a Resource
Investigate the water cycle and its effect on climate, landforms, and life.	<ul style="list-style-type: none">● Layers of the Earth● The Atmosphere● The Geosphere● Introduction to the Water Cycle
Investigate the components of the solar system, developing an appreciation of the distances between them.	<ul style="list-style-type: none">● Introduction to the Solar System● Planet Earth● The Sun● Days, Months and Years● The Inner Planets● The Outer Planets● Sizes in Space● Distances in Space

Physical world

Topics	Lesson Names
Explore, describe, and represent patterns and trends for everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe the effect of forces (contact and non-contact) on the motion of objects; identify and describe everyday examples of sources of energy, forms of energy, and energy transformations.	<p><i>Forces</i></p> <ul style="list-style-type: none">● What are Forces?● Drawing Forces● Contact and Non-Contact Forces● Gravity <p><i>Motion</i></p> <ul style="list-style-type: none">● Units of Distance <p><i>Introduction to Energy</i></p> <ul style="list-style-type: none">● What Is Energy?● Types of Energy● Energy Transformations <p><i>Light Energy</i></p> <ul style="list-style-type: none">● Light● How Do We See?● The Movement of Light● The Speed of Light● Ray Diagrams● Shadows

	<ul style="list-style-type: none"> • Comparing Shadows <p><i>Chemical Energy</i></p> <ul style="list-style-type: none"> • Energy from Fuel • Food Energy • Photosynthesis <p><i>Heat Energy</i></p> <ul style="list-style-type: none"> • What is Heat? • Heat Transfer • Conduction • Convection • Radiation • Conductors and Insulators <p><i>Electrical Energy</i></p> <ul style="list-style-type: none"> • Electricity • Where Electricity Comes From • Circuitry • Open and Closed Circuits <p><i>Conserving Energy</i></p> <ul style="list-style-type: none"> • Energy Conservation • Non-Renewable Energy • Renewable Energy • Renewable vs. Non-Renewable <p><i>Electricity and Magnetism</i></p> <ul style="list-style-type: none"> • Magnetism • Energy in New Zealand
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Material world

Topics	Lesson Names
<p>Group materials in different ways, based on the observations and measurements of the characteristic chemical and physical properties of a range of different materials.</p> <p>Compare chemical and physical changes.</p>	<p><i>States of Matter</i></p> <ul style="list-style-type: none"> • Introduction to Matter • Solids • Liquids • Gases • Gases have Masses? • Comparing States of Water • Secretive Substances • Extreme Conditions <p><i>Changing States</i></p> <ul style="list-style-type: none"> • Melting • Freezing

	<ul style="list-style-type: none"> ● Condensation ● Sublimation ● Deposition ● Boiling and Evaporation ● Temperature and States of Matter
<p>Relate the observed, characteristic chemical and physical properties of a range of different materials to technological uses and natural processes.</p>	<p><i>Physical and Chemical Properties</i></p> <ul style="list-style-type: none"> ● Physical Properties ● Metals and Non-Metals ● Physical Change ● Chemical Reactions ● Cooking and Burning ● Rusting <p><i>Elements, Compounds and Mixtures</i></p> <ul style="list-style-type: none"> ● Pure and Impure Substances ● Mixtures ● Solubility ● Solvents and Solutes <p><i>Chemistry and Society</i></p> <ul style="list-style-type: none"> ● The Water Cycle and Weather ● States of Matter in Space ● When Water Freezes

Nature of science

Topics	Lesson Names
<p>Appreciate that science is a way of explaining the world and that science knowledge changes over time. Identify ways in which scientists work together and provide evidence to support their ideas.</p>	<ul style="list-style-type: none"> ● What is Science? ● Fair Tests ● Repeatability, Reliability and Accuracy ● Making Results Tables ● Constructing Graphs ● Interpreting Graphs ● Evaluating in Science ● Practical Investigation: Heating Water (Pre-Practical) ● Practical Investigation: Heating Water (Post-Practical) ● Careers In Science ● Safety Guidelines and Hazards ● Science Equipment ● The Bunsen Burner ● Measuring and Reading Scales ● Interpreting Diagrams ● Scientific Method

<p>Build on prior experiences, working together to share and examine their own and others' knowledge. Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations.</p>	<ul style="list-style-type: none"> • Variables <p><i>Diagnostic Assessments</i></p> <ul style="list-style-type: none"> • NOS Diagnostic Assessment Levels 3/4 • NOS Diagnostic Assessment Levels 4/5 • NOS Diagnostic Assessment Levels 3/4/5 <p><i>Practical Investigations</i></p>
<p>Begin to use a range of scientific symbols, conventions, and vocabulary. Engage with a range of science texts and begin to question the purposes for which these texts are constructed.</p>	<p><i>The Five Science Capabilities</i></p> <ul style="list-style-type: none"> • Different Views on Ethics • Ethical Issues of Organ Transplants • Ethics Around the World • Ethics of Experimentation • Introduction to Ethics • The Ethics of Genetics • Collecting and Tabulating Data • Observations and Inferences • Quality of Data • Source Analysis • Source Referencing • Adapting to Extreme Climates • Antarctica • Antibiotics • Aotearoa - Native Species • Aotearoa - Past, Present, Future • Artificial Selection: The Good, the Bad and the Downright Strange • Back to the Sea: Cetacean Evolution • Bacterial Resistance • Cell Theory • Conservation in New Zealand • Dairy Farming in New Zealand • Deforestation in New Zealand • Degenerative Diseases • Endocrine Diseases • Ethical Issues of Organ Transplants • Evolution of New Zealand Animals • Evolution of New Zealand Plants • Extreme Environments: The Alpine Zone • Genomics • History of Microscopes • Impact of Humans on New Zealand Wildlife • Maple Syrup • Organ Transplants • Plant Cloning • Pollution • Predicting Population Changes • Protecting our Native Wildlife

- Sensory Receptors and the Eye
- Starfish Nervous System
- Stem Cells
- The Palm Oil Predicament
- Vaccination
- Will I Stay or Will I Go?
- A Day in the Life of an Industrial Chemist
- Analytical Chemistry
- Discovering Elements
- Effects of Radiation on Humans
- Fuels and Climate Change
- Fuels and Pharmaceuticals
- Heatpumps and Refrigerators
- Marie Curie and Radioactivity
- Materials Science
- Melting Polar Ice
- Reactions Around Us: Acid Rain
- Reactions Around Us: Photosynthesis
- Reactions Around Us: Respiration
- Recycling Glass
- Recycling Metal
- Recycling Plastic
- Recycling Sewage
- Secretive Substances
- Separation In Food
- Separation in Industries
- States of Matter in Space
- Synthetic Materials
- The Father of Modern Chemistry
- The Water Cycle and Weather
- The Yeast of our Problems
- Waste Management
- Water Treatment
- When Water Freezes
- Working In Chemistry
- Tides
- Bionic Eye
- Car Safety Systems
- Cars of the Future
- Cell Phones
- Comparing Robots
- Earth's Magnetic Field
- Electromagnetic Radiation and Medicine
- Energy Efficient Houses
- Energy in Food
- Energy in New Zealand
- Hearing Sound
- How BB-8 Works

- Internet
- Maglev Trains
- Planetary Motion
- Radar
- Radio Waves
- Rockets
- Sports Science
- Steam Engines
- The Development of Flight
- The Electromagnetic Spectrum
- The History of Lenses
- The Power Grid and You
- The Sixth Sense: Electroreception
- Turned Down for What: Workplace Noise
- War of the Currents
- You, Me and UV
- Human Influences on Climate
- Seismic Hazard Case Studies
- Effects: Polar Ice
- Effects of Climate Change on Biodiversity
- El Nino and La Nina
- Antarctica, a Shared Continent
- Aquifers
- Calendars and the Solar Year
- Carbon Capture
- Carbon Footprints
- Causes of the Enhanced Greenhouse Effect
- CFCs and the Ozone Layer
- Changing Seasons
- Computer Modelling and the Environment
- Desalination
- Development of the Geological Timescale
- Earth's Magnetic Field
- Effects of Climate Change on Temperature
- Evidence of the Earth's Structure
- Exploring Space
- Hydroelectricity
- Irrigation
- Matariki and the Maori New Year
- Planetary Motion
- Pollution
- Renewable Energy
- Satellites
- Supercontinents
- Telescopes
- The Cosmic Microwave Background
- The Enhanced Greenhouse Effect
- Volcano Exploration Robots

- Water Conservation
- Water Management
- Where Have all the Turtles Gone?

Reading Comprehension

- Science Comprehension: The Origin of Mitochondria
- Adapting for Survival
- Ancient Anatomy
- Attraction: It's all in the Armpits
- Epigenetics - Inheritance is Strange
- Evolution and Extinction
- How Does a Jellyfish Sting?
- Reading Comprehension: Bee Kind
- The Ancestor of All Things
- The History of Disease
- Tiny, Tubby, Tenacious Tardigrades
- Acids and Bases
- Chemical Clocks
- Chemistry: Glorified Baking?
- Cosmetics and Chemistry: A Historical Perspective
- Helium: More Than a Bit of Squeaky Fun
- Metallic Hydrogen or: How I Learned to Stop Worrying and Love the Scientific Process
- The Cave of the Crystals
- The Mystery of Opals
- Watching Paint Dry
- What's the Matter?
- A Bright Idea
- Crashing Drones
- Development of Light Bulbs
- Energy in Rockets
- Heat Transfer in the Atmosphere and the Oceans
- History of Radio Communication
- History of Rockets
- How Planes Stay Up
- Magnetic Navigation
- Ultrasound
- Baked Rocks in the Lachlan Fold Belt
- Cloudy with a Chance of Hamburgers
- Hot Rocks of the Cosgrove Hotspot Track
- Ice Tectonics on Europa
- If Climate Change is Real, How Come...?
- Science Comprehension: Black Holes
- Science Comprehension: Pluto - The Big Little Planet
- Science Comprehension: Why Doesn't Earth Have

	<p>Rings?</p> <ul style="list-style-type: none"> ● Scientific Writing: Arguing For or Against Climate Change ● Scientific Writing: The Time Traveller's Holiday Guide! ● Subduction Zones and Ophiolite Belts ● Troubled Waters ● Zircons are Forever <p><i>Data Interpretation</i></p> <ul style="list-style-type: none"> ● Body Temperature ● Classifying Dinosaurs ● DNA Fingerprinting: Thirsty Thievery ● Food Safety and Salmonella ● Guess Who: Animal Edition ● Marine Ecosystems and Overfishing ● Natural Selection in Action! ● Predator-Prey Dynamics ● Regulating Blood Glucose Levels ● Relative Heart Size ● Taking a Lichen to Moss ● The Biodiversity Gradient ● The Blue People of Troublesome Creek ● The Size of Cells ● Breaking the Law (of Conservation of Mass)? ● Graphing Rate of Reaction ● Graphs and Tables of Mixtures ● Identifying Chemical Reactions ● Name That Radiation! ● Saturation and Line Graphs ● Turning Observations Into Facts ● Understanding the Periodic Table ● Energy Efficiency ● Flipping Poles ● Graphing and Analysing Motion ● The Speed of Heat Transfer ● Comparing Minerals ● Examining Past Climate ● Our Water Use ● Reading a Weather Map ● Redshift and the Expanding Universe ● Rock Density ● Space Travel: The Weight Loss Sensation! ● The Southern Oscillation Index ● Understanding Megaquakes
<p>Use their growing science knowledge when considering issues of concern to them. Explore various aspects of an issue and make decisions</p>	<p><i>Science in Context Units</i></p> <ul style="list-style-type: none"> ● A Day in the Life of an Industrial Chemist

about possible actions.

- Analytical Chemistry
- Careers In Science
- Working In Chemistry
- Working in Physics
- Blood as a Mixture
- Blood Groups
- DNA Fingerprinting
- Fingerprints and Forensics
- Gel Electrophoresis
- Chromatography: Separating Colours
- Antarctica, a Shared Continent
- Carbon Capture
- Carbon Footprints
- CFCs and the Ozone Layer
- Climate and Weather
- Computer Modelling and the Environment
- El Nino and La Nina
- Examining Past Climate
- Human Influences on Climate
- If Climate Change is Real, How Come...?
- The Enhanced Greenhouse Effect
- The Greenhouse Effect
- Troubled Waters
- Climate Change and Biodiversity
- Disappearing Polar Ice
- It's Getting Hot in Here
- The Great Barrier Reef and Coral Bleaching
- Where Have all the Turtles Gone?
- Air as a Resource
- Geothermal Energy
- Living Things as a Resource
- Renewable Energy Sources
- Renewable vs. Non-Renewable
- Solar Energy
- Water Power
- Wind as a Resource
- Wind Turbines
- Aquifers
- Cars of the Future
- Cogeneration/Engines
- Desalination
- Irrigation
- Water Conservation
- Water Management
- Energy Calculations
- Energy Efficient Houses
- The Power Grid and You
- A Green Utopia

- Alternate Fuels
- Bots to the Rescue!
- Cool Robots
- Disaster Recovery Robots
- How Far Can Your Boots Walk?
- Inspired by Nature (Winning Question)
- Life on Mars
- Navigating for a Robot Boat
- Relief Bots
- Rescue Mission
- The Mass of an Email
- The Zombie Apocalypse Water Shortage
- A Limitless Source Of Energy
- Cleaning Up Our Litter
- Reclaiming our Climate
- Vertical Garden
- Water Purification
- Newton's First Law
- Newton's Law of Universal Gravitation
- Newton's Second Law
- Newton's Third Law
- Scientific Theory
- A Brief History of Hawking

Monthly Science News

- Nobel Prizes 2016
- Tickled Brains and Pickled Brains (November 2016)
- Feathery Dinosaurs (December 2016)
- Dragons in the Deep! (January 2017)
- Nobel Prizes 2017 (October 2017)
- The Science of Puppy Dog Eyes (November 2017)
- The Tiny Toadlet's Conundrum (December 2017)
- Levitation at UChicago! (February 2017)
- The Secret Lives of Ultra-Cool Dwarf Stars (March 2017)
- Save the Great Barrier Reef! (April 2017)
- Lamb in a Bag (May 2017)
- Rewriting Human History (June 2017)
- The James Webb Space Telescope (July 2017)
- Cut and Paste for Xenotransplantations (August 2017)
- Apocalypse Now: Natural Disasters of September, 2017
- The Microbes That Control What We Do (January 2018)
- The Identification of a Mystery Disease (February 2018)



- Tardigrades in Parking Lots (March 2018)
- Smelly Socks and Malaria Transmission (April 2018)
- The Knotty New DNA Structure! (May 2018)
- From Zero to Hero! Honey Bee Mathematicians (June 2018)
- Trapped in a Cave (July 2018)
- Superbugs are the Real Super Villains (August 2018)
- Nobel Prizes 2018 (October 2018)
- Machine Learning and the Science Crisis (February 2019)
- 5G Mobile Technology
- Astronaut Pee
- Impacts of the 2019-2020 Australian Bushfires
- Rare Dinosaur Skin Offers Insights Into Evolution
- Social Distancing: Why might people respond differently? (Moral Reasoning)
- The Science of Social Distancing
- Understanding Coronavirus & COVID-19

Level 4

Living world

Topics	Lesson Names
<p>Recognise that there are life processes common to all living things and that these occur in different ways.</p>	<p><i>Living or Non-Living</i></p> <ul style="list-style-type: none"> ● Living or Non-Living? ● MRS C GREN ● Levels of Organisation ● Introduction to Body Systems <p><i>Cell Biology</i></p> <ul style="list-style-type: none"> ● Magnification ● Types of Microscopes ● Parts and Function of a Microscope ● Size of Cells ● The Size of Cells ● Using a Microscope ● What is a Cell? <p><i>Animal Systems</i></p> <ul style="list-style-type: none"> ● Specialised Animal Cells I ● Specialised Animal Cells II ● Gas Exchange ● Respiration in Cells ● Levels of Organisation ● Introduction to Body Systems <p><i>Plant Systems</i></p> <ul style="list-style-type: none"> ● Specialised Plant Cells - Photosynthetic and Guard Cells ● Specialised Plant Cells - Root Hairs and Conducting Cells
<p>Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.</p>	<ul style="list-style-type: none"> ● <i>Adaptations and Ecosystems</i> ● Ecology ● Environments ● Life in a Rock Pool ● Life in the Desert ● Polar Environments ● Ecosystems ● Life at the Poles ● Biotic and Abiotic Factors ● Adaptations

	<p><i>Food Chains and Food Webs</i></p> <ul style="list-style-type: none"> ● Predators, Prey and Competition ● Producers ● Food Webs ● Decomposers ● Consumers ● Food Chains <p><i>New Zealand Ecology</i></p> <ul style="list-style-type: none"> ● Aotearoa - Past, Present, Future ● Aotearoa - Native Species ● Aotearoa - Species Conservation
<p>Begin to group plants, animals, and other living things into science-based classifications.</p> <p>Explore how the groups of living things we have in the world have changed over long periods of time and appreciate that some living things in New Zealand are quite different from living things in other areas of the world.</p>	<p><i>Classification</i></p> <ul style="list-style-type: none"> ● Introduction to Dichotomous Keys ● Linnaean Classification ● Binomial Nomenclature ● Branching Keys ● Uses of Classification ● Circular Keys ● Species and Hybrids ● Vertebrates ● Animal Phyla ● Vertebrates <p><i>Genetics and Evolution of NZ Species</i></p> <ul style="list-style-type: none"> ● Basics of Evolution ● Evolution of New Zealand Animals ● Evolution of New Zealand Plants

Planet Earth and beyond

Topics	Lesson Names
<p>Develop an understanding that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.</p>	<p><i>Earth Systems</i></p> <ul style="list-style-type: none"> ● Fossil Fuels as a Resource ● Soil as a Resource ● Minerals and Ores as Resources ● Mining ● Solar Energy ● Wind Turbines ● Nuclear Fuel as a Resource ● Water Power ● Geothermal Energy <p><i>Rocks and the Rock Cycle</i></p> <ul style="list-style-type: none"> ● Metamorphic Rocks ● Developing the Geological Timescale

	<ul style="list-style-type: none"> • Erosion and Sedimentation • Fossils • Igneous Rocks • Sedimentary Rocks • The Rock Cycle • Weathering
Investigate the water cycle and its effect on climate, landforms, and life.	<ul style="list-style-type: none"> • Layers of the Earth • Spheres • Water on Earth • States of Water • Water Cycle • The Water Cycle as a Closed System • Influences on the Water Cycle
Investigate the components of the solar system, developing an appreciation of the distances between them.	<ul style="list-style-type: none"> • Our Solar System • Gravity and Orbits • Tides • Comets • Asteroids and Meteoroids • Earth, Moon and Sun • Day and Night • Time Zones • Seasons • Phases of the Moon

Physical world

Topics	Lesson Names
Explore, describe, and represent patterns and trends for everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe the effect of forces (contact and non-contact) on the motion of objects; identify and describe everyday examples of sources of energy, forms of energy, and energy transformations.	<p><i>Forces</i></p> <ul style="list-style-type: none"> • Introduction to Forces • Types of Forces • Balanced and Unbalanced Forces • Weight and Mass • Friction <p><i>Motion</i></p> <ul style="list-style-type: none"> • Distance and Time • Speed • Acceleration <p><i>Energy Forms</i></p> <ul style="list-style-type: none"> • What is Energy? • Kinetic Energy • Potential Energy • Identifying Energy Types • Extension: Energy Calculations

	<p><i>Conservation of Energy</i></p> <ul style="list-style-type: none"> • Energy Sources • The Law of Conservation of Energy • Energy Transformations • Useful vs Wasted Energy <p><i>Transfer of Energy</i></p> <ul style="list-style-type: none"> • Conduction, Convection, and Radiation • Conductors and Insulators <p><i>Renewable vs. Non-renewable</i></p> <ul style="list-style-type: none"> • Non-Renewable Energy • Renewable Energy • Renewable vs. Non-Renewable <p><i>Light & Sound</i></p> <ul style="list-style-type: none"> • Introduction to Waves • Sound and Oscilloscopes • Light and Ray Diagrams • Reflection and Plane Mirrors • Curved Mirrors • Refraction • Lenses • Dispersion and Colours <p><i>Electricity and Magnetism</i></p> <ul style="list-style-type: none"> • Electricity • Static Electricity • Conductors and Insulators • Magnetism • Permanent Magnetic Fields • Magnetic Fields due to Conductors • Measuring Electricity
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Material world

Topics	Lesson Names
Begin to develop an understanding of the particle nature of matter and use this to explain observed changes.	<ul style="list-style-type: none"> • Particle Model of Matter • Energy In Matter and Heat Transfer • Compounds • Molecules • Chemical Formulas • Introduction to Particles
Relate the observed, characteristic chemical and physical properties of a range of different materials to technological uses and natural processes.	<p><i>Physical and Chemical Properties</i></p> <ul style="list-style-type: none"> • Physical Properties • Density

- Mass and Volume
- Pressure
- Physical Change
- Physical Changes and Reversible Reactions
- Chemical Properties
- Rusting

Elements, Compounds and Mixtures

- Solute and Solvent
- Concentrations
- Introduction to Mixtures
- Separation - Evaporation
- Separation - Distillation
- Separation - Chromatography
- Investigation task - Separating a mixture

Chemistry and Society

- Heat Pumps
- Alchemy
- Recycling
- Refrigerators and Refrigerants
- States of Matter in Space
- Synthetic Materials
- Using Substances Based on their Properties

Nature of science

Topics	Lesson Names
<p>Appreciate that science is a way of explaining the world and that science knowledge changes over time.</p> <p>Identify ways in which scientists work together and provide evidence to support their ideas.</p>	<ul style="list-style-type: none"> • What is Science? • Fair Tests • Repeatability, Reliability and Accuracy • Making Results Tables • Constructing Graphs • Interpreting Graphs • Evaluating in Science • Practical Investigation: Heating Water (Pre-Practical) • Practical Investigation: Heating Water (Post-Practical) • Careers In Science • Safety Guidelines and Hazards • Science Equipment • The Bunsen Burner • Measuring and Reading Scales • Interpreting Diagrams • Scientific Method

<p>Build on prior experiences, working together to share and examine their own and others' knowledge. Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations.</p>	<ul style="list-style-type: none"> • Variables <p><i>Diagnostic Assessments</i></p> <ul style="list-style-type: none"> • NOS Diagnostic Assessment Levels 3/4 • NOS Diagnostic Assessment Levels 4/5 • NOS Diagnostic Assessment Levels 3/4/5 <p><i>Practical Investigations</i></p>
<p>Begin to use a range of scientific symbols, conventions, and vocabulary. Engage with a range of science texts and begin to question the purposes for which these texts are constructed.</p>	<p><i>The Five Science Capabilities</i></p> <ul style="list-style-type: none"> • Different Views on Ethics • Ethical Issues of Organ Transplants • Ethics Around the World • Ethics of Experimentation • Introduction to Ethics • The Ethics of Genetics • Collecting and Tabulating Data • Observations and Inferences • Quality of Data • Source Analysis • Source Referencing • Adapting to Extreme Climates • Antarctica • Antibiotics • Aotearoa - Native Species • Aotearoa - Past, Present, Future • Artificial Selection: The Good, the Bad and the Downright Strange • Back to the Sea: Cetacean Evolution • Bacterial Resistance • Cell Theory • Conservation in New Zealand • Dairy Farming in New Zealand • Deforestation in New Zealand • Degenerative Diseases • Endocrine Diseases • Ethical Issues of Organ Transplants • Evolution of New Zealand Animals • Evolution of New Zealand Plants • Extreme Environments: The Alpine Zone • Genomics • History of Microscopes • Impact of Humans on New Zealand Wildlife • Maple Syrup • Organ Transplants • Plant Cloning • Pollution • Predicting Population Changes • Protecting our Native Wildlife

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- Starfish Nervous System
- Stem Cells
- The Palm Oil Predicament
- Vaccination
- Will I Stay or Will I Go?
- A Day in the Life of an Industrial Chemist
- Analytical Chemistry
- Discovering Elements
- Effects of Radiation on Humans
- Fuels and Climate Change
- Fuels and Pharmaceuticals
- Heatpumps and Refrigerators
- Marie Curie and Radioactivity
- Materials Science
- Melting Polar Ice
- Reactions Around Us: Acid Rain
- Reactions Around Us: Photosynthesis
- Reactions Around Us: Respiration
- Recycling Glass
- Recycling Metal
- Recycling Plastic
- Recycling Sewage
- Secretive Substances
- Separation In Food
- Separation in Industries
- States of Matter in Space
- Synthetic Materials
- The Father of Modern Chemistry
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- The Yeast of our Problems
- Waste Management
- Water Treatment
- When Water Freezes
- Working In Chemistry
- Tides
- Bionic Eye
- Car Safety Systems
- Cars of the Future
- Cell Phones
- Comparing Robots
- Earth's Magnetic Field
- Electromagnetic Radiation and Medicine
- Energy Efficient Houses
- Energy in Food
- Energy in New Zealand
- Hearing Sound
- How BB-8 Works

- Internet
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- Radio Waves
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- Supercontinents
- Telescopes
- The Cosmic Microwave Background
- The Enhanced Greenhouse Effect
- Volcano Exploration Robots

- Water Conservation
- Water Management
- Where Have all the Turtles Gone?

Reading Comprehension

- Science Comprehension: The Origin of Mitochondria
- Adapting for Survival
- Ancient Anatomy
- Attraction: It's all in the Armpits
- Epigenetics - Inheritance is Strange
- Evolution and Extinction
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- Chemistry: Glorified Baking?
- Cosmetics and Chemistry: A Historical Perspective
- Helium: More Than a Bit of Squeaky Fun
- Metallic Hydrogen or: How I Learned to Stop Worrying and Love the Scientific Process
- The Cave of the Crystals
- The Mystery of Opals
- Watching Paint Dry
- What's the Matter?
- A Bright Idea
- Crashing Drones
- Development of Light Bulbs
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- If Climate Change is Real, How Come...?
- Science Comprehension: Black Holes
- Science Comprehension: Pluto - The Big Little Planet
- Science Comprehension: Why Doesn't Earth Have

	<p>Rings?</p> <ul style="list-style-type: none"> • Scientific Writing: Arguing For or Against Climate Change • Scientific Writing: The Time Traveller's Holiday Guide! • Subduction Zones and Ophiolite Belts • Troubled Waters • Zircons are Forever <p><i>Data Interpretation</i></p> <ul style="list-style-type: none"> • Body Temperature • Classifying Dinosaurs • DNA Fingerprinting: Thirsty Thievery • Food Safety and Salmonella • Guess Who: Animal Edition • Marine Ecosystems and Overfishing • Natural Selection in Action! • Predator-Prey Dynamics • Regulating Blood Glucose Levels • Relative Heart Size • Taking a Lichen to Moss • The Biodiversity Gradient • The Blue People of Troublesome Creek • The Size of Cells • Breaking the Law (of Conservation of Mass)? • Graphing Rate of Reaction • Graphs and Tables of Mixtures • Identifying Chemical Reactions • Name That Radiation! • Saturation and Line Graphs • Turning Observations Into Facts • Understanding the Periodic Table • Energy Efficiency • Flipping Poles • Graphing and Analysing Motion • The Speed of Heat Transfer • Comparing Minerals • Examining Past Climate • Our Water Use • Reading a Weather Map • Redshift and the Expanding Universe • Rock Density • Space Travel: The Weight Loss Sensation! • The Southern Oscillation Index • Understanding Megaquakes
<p>Use their growing science knowledge when considering issues of concern to them. Explore various aspects of an issue and make decisions</p>	<p><i>Science in Context Units</i></p> <ul style="list-style-type: none"> • A Day in the Life of an Industrial Chemist

about possible actions.

- Analytical Chemistry
- Careers In Science
- Working In Chemistry
- Working in Physics
- Blood as a Mixture
- Blood Groups
- DNA Fingerprinting
- Fingerprints and Forensics
- Gel Electrophoresis
- Chromatography: Separating Colours
- Antarctica, a Shared Continent
- Carbon Capture
- Carbon Footprints
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- Renewable vs. Non-Renewable
- Solar Energy
- Water Power
- Wind as a Resource
- Wind Turbines
- Aquifers
- Cars of the Future
- Cogeneration/Engines
- Desalination
- Irrigation
- Water Conservation
- Water Management
- Energy Calculations
- Energy Efficient Houses
- The Power Grid and You
- A Green Utopia

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- Bots to the Rescue!
- Cool Robots
- Disaster Recovery Robots
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- Navigating for a Robot Boat
- Relief Bots
- Rescue Mission
- The Mass of an Email
- The Zombie Apocalypse Water Shortage
- A Limitless Source Of Energy
- Cleaning Up Our Litter
- Reclaiming our Climate
- Vertical Garden
- Water Purification
- Newton's First Law
- Newton's Law of Universal Gravitation
- Newton's Second Law
- Newton's Third Law
- Scientific Theory
- A Brief History of Hawking

Monthly Science News

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- Social Distancing: Why might people respond differently? (Moral Reasoning)
- The Science of Social Distancing
- Understanding Coronavirus & COVID-19

Level 5

Living world

Topics	Lesson Names
<p>Identify the key structural features and functions involved in the life processes of plants and animals. Describe the organisation of life at the cellular level.</p>	<p><i>Cell Biology</i></p> <ul style="list-style-type: none"> ● Cell Division in Bacteria ● Bacterial Cell Structure ● Cell Division in Humans - Mitosis ● Eukaryotic Cells ● Cell Division in Humans - Meiosis ● Prokaryotic Cells ● Animal Cell Structure ● Animal vs Plant Cells ● Plant Cell Structure ● Fungal Cell Structure <p><i>Digestive System</i></p> <ul style="list-style-type: none"> ● Digestive System As A Whole ● Food Groups ● Mouth and Oesophagus ● Stomach and Small Intestine ● Large Intestine and Rectum ● Comparing Digestion in Other Animals ● The Microbes That Control What We Do <p><i>Exercise and Stress</i></p> <ul style="list-style-type: none"> ● Exercise and the Body ● Stress Effects on the Body ● Adapting to Extreme Climates <p><i>Circulatory System</i></p> <ul style="list-style-type: none"> ● Introduction to the Circulatory System ● Heart ● Blood Vessels ● Blood <p><i>Musculoskeletal System</i></p> <ul style="list-style-type: none"> ● Musculoskeletal System ● Bones & Joints ● Muscles ● Injuries <p><i>Respiratory System</i></p> <ul style="list-style-type: none"> ● Introduction to Respiration

	<ul style="list-style-type: none"> ● Breathing ● Gas Exchange ● Comparing Respiration ● Respiration in Cells <p><i>Immune System</i></p> <ul style="list-style-type: none"> ● Introduction to the Immune System ● The Body's First and Second Lines of Defence ● What are Pathogens? ● The Third Line of Defence ● Disease Treatment ● Pasteur & Koch ● Disease Transmission <p><i>Excretory System</i></p> <ul style="list-style-type: none"> ● Introduction to Excretory System ● Excretory Organs ● Kidney Disease ● Kidneys & Urine Production <p><i>Reproductive System</i></p> <ul style="list-style-type: none"> ● Puberty ● Sexual Reproduction in Animals ● Male Reproduction ● Female Reproduction ● Pregnancy ● Birth ● Asexual Reproduction in Animals <p><i>Endocrine System</i></p> <ul style="list-style-type: none"> ● Introduction to the Endocrine System ● Glands of the Endocrine System ● Hormones of the Endocrine System ● Endocrine Diseases <p><i>Plant Systems</i></p> <ul style="list-style-type: none"> ● Photosynthesis ● Plant Systems ● Respiration and Gas Exchange ● Asexual Reproduction in Plants ● Sexual Reproduction in Plants ● Pollination ● Seed Dispersal & Germination
<p>Investigate the interdependence of living things (including humans) in an ecosystem.</p>	<p><i>Adaptations and Ecosystems</i></p> <ul style="list-style-type: none"> ● Introduction to Ecosystems ● Species vs Organism ● The Biosphere and Biomes ● Parts of an Ecosystem

	<ul style="list-style-type: none"> ● Abiotic Factors ● Biotic Factors and Competition ● Pollution and Ecosystems ● Adaptations ● Symbiosis <p><i>Food Chains and Food Webs</i></p> <ul style="list-style-type: none"> ● Producers ● Trophic Levels ● The Carbon Cycle ● Consumers and Decomposers ● Food Chains and Food Webs ● Interdependent Relationships <p><i>New Zealand Ecology</i></p> <ul style="list-style-type: none"> ● Dairy Farming in New Zealand ● Impact of Humans on New Zealand Wildlife ● Deforestation ● Protecting our Native Wildlife ● Conservation in New Zealand
<p>Describe the basic processes by which genetic information is passed from one generation to the next.</p>	<p><i>DNA the Molecule</i></p> <ul style="list-style-type: none"> ● Basics of DNA ● Structure of DNA ● Nitrogenous Bases <p><i>Genes and Chromosomes</i></p> <ul style="list-style-type: none"> ● Genes and Genetic Information ● Homologous Chromosomes ● Sex Chromosomes <p><i>Cell Division</i></p> <ul style="list-style-type: none"> ● DNA Replication ● Mitosis ● Gametes and Fertilisation ● Meiosis ● Mitosis vs. Meiosis <p><i>Inheritance</i></p> <ul style="list-style-type: none"> ● Mendel ● Alleles ● Inheriting Alleles and Punnett Squares ● Making Punnett Squares ● Asexual and Sexual Reproduction ● Dominant/Recessive Interactions <p><i>Evolution</i></p> <ul style="list-style-type: none"> ● Darwin's Theory of Evolution ● Theories and Evidence

	<ul style="list-style-type: none"> ● Mechanisms of Evolution ● Evidence from Living Species ● Fossils and the Fossil Record <p><i>Extension</i></p> <ul style="list-style-type: none"> ● Sex Linkage, Punnett Squares and Pedigrees ● The Geological Timescale ● Examples of Evolution ● Pedigrees ● Sex Linkage ● Chromosomal Abnormalities ● Developing the Geological Timescale
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Planet Earth and beyond

Topics	Lesson Names
Investigate the composition, structure, and features of the geosphere, hydrosphere, and atmosphere.	<p><i>Earth Systems</i></p> <ul style="list-style-type: none"> ● Earth's Structure ● Supercontinents ● Transform Boundaries and Faults ● Compositional Layers of the Earth ● Spheres ● Evidence of the Earth's Structure ● Wegener's Theory of Continental Drift ● Seafloor Spreading and Hess' Theory ● Plate Tectonics ● Divergent Plate Boundaries ● Convergent Plate Boundaries <p><i>Earthquakes, Volcanoes and Tsunamis</i></p> <ul style="list-style-type: none"> ● Earthquakes ● Seismic Hazard Case Studies ● Earthquake Hazards ● Measuring Earthquakes ● Volcanology ● Formation of Volcanoes ● Volcanic Eruptions ● Types of Lava ● Living with Volcanoes ● Tsunamis
Investigate how heat from the Sun, the Earth, and human activities is distributed around Earth by the geosphere, hydrosphere, and atmosphere.	<p><i>Earth's Spheres</i></p> <ul style="list-style-type: none"> ● Spheres ● Water Cycle ● Carbon Cycle ● Nitrogen Cycle ● Phosphorus Cycle

	<ul style="list-style-type: none"> ● The Greenhouse Effect ● Climate and Weather ● Ocean Currents ● El Nino and La Nina <p><i>Human Impact</i></p> <ul style="list-style-type: none"> ● Human Influences on Climate ● The Enhanced Greenhouse Effect ● Causes of the Enhanced Greenhouse Effect ● Effects: Temperature ● Effects: Polar Ice ● Effects of Climate Change on Biodiversity
Investigate the conditions on the planets and their moons, and the factors affecting them.	<ul style="list-style-type: none"> ● Our Solar System and Beyond ● Gravity ● Light Speed ● Lunar Eclipses ● Solar Eclipses ● The Big Bang Theory (Extension)

Physical world

Topics	Lesson Names
Identify and describe the patterns associated with physical phenomena found in simple everyday situations involving movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe energy changes and conservation of energy, simple electrical circuits, and the effect of contact and non-contact on the motion of objects.	<p><i>Forces</i></p> <ul style="list-style-type: none"> ● Drawing Forces ● Calculating Net Force ● Newton's First Law ● Newton's Second Law ● Newton's Third Law <p><i>Motion</i></p> <ul style="list-style-type: none"> ● Distance-Time Graphs ● Distance, Speed, and Time ● Velocity-Time Graphs ● Speed-Time Graphs ● Acceleration ● Using the Acceleration Formula to Calculate Final Velocity ● Using the Acceleration Formula to Calculate Initial Velocity ● Using the Acceleration Formula to Calculate Time <p><i>Heat</i></p> <ul style="list-style-type: none"> ● Heat Transfer ● Conduction ● Convection

	<ul style="list-style-type: none"> ● Radiation ● Conductors and Insulators <p><i>Light</i></p> <ul style="list-style-type: none"> ● Light as a Wave ● Colour ● Materials ● Reflection ● Refraction ● Lenses ● Light: Summary <p><i>Sound</i></p> <ul style="list-style-type: none"> ● Sound ● Sound Formation ● Pitch and Loudness ● Hearing Sound <p><i>Extension</i></p> <ul style="list-style-type: none"> ● Curved Mirrors ● Total Internal Reflection ● Ultrasound - Reading comprehension
<p>Explore a technological or biological application of physics.</p>	<ul style="list-style-type: none"> ● A Bright Idea ● Bionic Eye ● Cars of the Future ● Cell Phones ● Cogeneration/Engines ● Effects of Radiation on Humans ● Electromagnetic Radiation and Medicine ● Energy Efficient Houses ● Energy in Food ● Energy in Rockets ● Heat Transfer in the Atmosphere and the Oceans ● Internet ● Radar ● Radio Waves ● Steam Engines ● The Electromagnetic Spectrum ● The History of Lenses ● The Power Grid and You ● Turned Down for What: Workplace Noise ● X-rays ● You, Me and UV

Material world

Topics	Lesson Names
<p>Investigate the chemical and physical properties of different groups of substances, for example, acids and bases, fuels, and metals.</p> <p>Distinguish between pure substances and mixtures and between elements and compounds.</p>	<p><i>Physical and Chemical Properties</i></p> <ul style="list-style-type: none"> ● Acids ● Bases ● Indicators ● Acid-Metal Reactions ● Neutralisation Reactions ● Metals, Non-Metals and Metalloids ● Oxidation Reactions ● Combustion Reactions <p><i>Elements, Compounds and Mixtures</i></p> <ul style="list-style-type: none"> ● Suspensions ● Colloids ● Emulsions ● Separating Suspensions ● Separating Suspensions - Centrifuging ● Separating Suspensions - Filtration ● Introduction to Elements, Compounds and Mixtures
<p>Describe the structure of the atoms of different elements.</p> <p>Distinguish between an element and a compound, a pure substance and a mixture at particle level.</p>	<p><i>Structure of Matter</i></p> <ul style="list-style-type: none"> ● Atoms ● Elements ● Atomic Structure ● Electron Arrangement ● The Periodic Table ● Atomic Symbols ● Introduction to Ions ● Ionic Compounds ● Naming Ionic Compounds <p><i>Chemical Reactions and Equations</i></p> <ul style="list-style-type: none"> ● Introduction to Chemical Reactions ● Reactants and Products ● Writing Chemical Equations: Word Equations ● Writing Chemical Equations: Symbol Equations ● Conservation of Mass ● Balancing Equations
<p>Link the properties of different groups of substances to the way they are used in society or occur in nature.</p>	<ul style="list-style-type: none"> ● Introduction to Chemical Reactions ● Reactants and Products ● Writing Chemical Equations: Word Equations ● Writing Chemical Equations: Symbol Equations

	<ul style="list-style-type: none"> ● Conservation of Mass ● Balancing Equations
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Nature of science

Topics	Lesson Names
<p>Understand that scientists' investigations are informed by current scientific theories and aim to collect evidence that will be interpreted through processes of logical argument.</p>	<ul style="list-style-type: none"> ● What is Science? ● Fair Tests ● Repeatability, Reliability and Accuracy ● Making Results Tables ● Constructing Graphs ● Interpreting Graphs ● Evaluating in Science ● Practical Investigation: Heating Water (Pre-Practical) ● Practical Investigation: Heating Water (Post-Practical) ● Careers In Science ● Safety Guidelines and Hazards ● Science Equipment ● The Bunsen Burner ● Measuring and Reading Scales ● Interpreting Diagrams ● Scientific Method ● Variables
<p>Develop and carry out more complex investigations, including using models.</p> <p>Show an increasing awareness of the complexity of working scientifically, including recognition of multiple variables.</p> <p>Begin to evaluate the suitability of the investigative methods chosen.</p>	<p><i>Diagnostic Assessments</i></p> <ul style="list-style-type: none"> ● NOS Diagnostic Assessment Levels 3/4 ● NOS Diagnostic Assessment Levels 4/5 ● NOS Diagnostic Assessment Levels 3/4/5 <p><i>Practical Investigations</i></p>
<p>Use a wider range of science vocabulary, symbols, and conventions.</p> <p>Apply their understandings of science to evaluate both popular and scientific texts (including visual and numerical literacy).</p>	<p><i>The Five Science Capabilities</i></p> <ul style="list-style-type: none"> ● Different Views on Ethics ● Ethical Issues of Organ Transplants ● Ethics Around the World ● Ethics of Experimentation ● Introduction to Ethics ● The Ethics of Genetics ● Collecting and Tabulating Data ● Observations and Inferences ● Quality of Data ● Source Analysis ● Source Referencing ● Adapting to Extreme Climates

- Antarctica
- Antibiotics
- Aotearoa - Native Species
- Aotearoa - Past, Present, Future
- Artificial Selection: The Good, the Bad and the Downright Strange
- Back to the Sea: Cetacean Evolution
- Bacterial Resistance
- Cell Theory
- Conservation in New Zealand
- Dairy Farming in New Zealand
- Deforestation in New Zealand
- Degenerative Diseases
- Endocrine Diseases
- Ethical Issues of Organ Transplants
- Evolution of New Zealand Animals
- Evolution of New Zealand Plants
- Extreme Environments: The Alpine Zone
- Genomics
- History of Microscopes
- Impact of Humans on New Zealand Wildlife
- Maple Syrup
- Organ Transplants
- Plant Cloning
- Pollution
- Predicting Population Changes
- Protecting our Native Wildlife
- Sensory Receptors and the Eye
- Starfish Nervous System
- Stem Cells
- The Palm Oil Predicament
- Vaccination
- Will I Stay or Will I Go?
- A Day in the Life of an Industrial Chemist
- Analytical Chemistry
- Discovering Elements
- Effects of Radiation on Humans
- Fuels and Climate Change
- Fuels and Pharmaceuticals
- Heatpumps and Refrigerators
- Marie Curie and Radioactivity
- Materials Science
- Melting Polar Ice
- Reactions Around Us: Acid Rain
- Reactions Around Us: Photosynthesis
- Reactions Around Us: Respiration
- Recycling Glass
- Recycling Metal

- Recycling Plastic
- Recycling Sewage
- Secretive Substances
- Separation In Food
- Separation in Industries
- States of Matter in Space
- Synthetic Materials
- The Father of Modern Chemistry
- The Water Cycle and Weather
- The Yeast of our Problems
- Waste Management
- Water Treatment
- When Water Freezes
- Working In Chemistry
- Tides
- Bionic Eye
- Car Safety Systems
- Cars of the Future
- Cell Phones
- Comparing Robots
- Earth's Magnetic Field
- Electromagnetic Radiation and Medicine
- Energy Efficient Houses
- Energy in Food
- Energy in New Zealand
- Hearing Sound
- How BB-8 Works
- Internet
- Maglev Trains
- Planetary Motion
- Radar
- Radio Waves
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- Sports Science
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- The Development of Flight
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- The Sixth Sense: Electroreception
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- War of the Currents
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- Effects: Polar Ice
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- Desalination
- Development of the Geological Timescale
- Earth's Magnetic Field
- Effects of Climate Change on Temperature
- Evidence of the Earth's Structure
- Exploring Space
- Hydroelectricity
- Irrigation
- Matariki and the Maori New Year
- Planetary Motion
- Pollution
- Renewable Energy
- Satellites
- Supercontinents
- Telescopes
- The Cosmic Microwave Background
- The Enhanced Greenhouse Effect
- Volcano Exploration Robots
- Water Conservation
- Water Management
- Where Have all the Turtles Gone?

Reading Comprehension

- Science Comprehension: The Origin of Mitochondria
- Adapting for Survival
- Ancient Anatomy
- Attraction: It's all in the Armpits
- Epigenetics - Inheritance is Strange
- Evolution and Extinction
- How Does a Jellyfish Sting?
- Reading Comprehension: Bee Kind
- The Ancestor of All Things
- The History of Disease
- Tiny, Tubby, Tenacious Tardigrades
- Acids and Bases
- Chemical Clocks
- Chemistry: Glorified Baking?
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- Helium: More Than a Bit of Squeaky Fun
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- Classifying Dinosaurs
- DNA Fingerprinting: Thirsty Thievery
- Food Safety and Salmonella
- Guess Who: Animal Edition
- Marine Ecosystems and Overfishing
- Natural Selection in Action!
- Predator-Prey Dynamics
- Regulating Blood Glucose Levels
- Relative Heart Size
- Taking a Lichen to Moss

	<ul style="list-style-type: none"> ● The Biodiversity Gradient ● The Blue People of Troublesome Creek ● The Size of Cells ● Breaking the Law (of Conservation of Mass)? ● Graphing Rate of Reaction ● Graphs and Tables of Mixtures ● Identifying Chemical Reactions ● Name That Radiation! ● Saturation and Line Graphs ● Turning Observations Into Facts ● Understanding the Periodic Table ● Energy Efficiency ● Flipping Poles ● Graphing and Analysing Motion ● The Speed of Heat Transfer ● Comparing Minerals ● Examining Past Climate ● Our Water Use ● Reading a Weather Map ● Redshift and the Expanding Universe ● Rock Density ● Space Travel: The Weight Loss Sensation! ● The Southern Oscillation Index ● Understanding Megaquakes
<p>Develop an understanding of socio-scientific issues by gathering relevant scientific information in order to draw evidence-based conclusions and to take action where appropriate.</p>	<p><i>Science in Context Units</i></p> <ul style="list-style-type: none"> ● A Day in the Life of an Industrial Chemist ● Analytical Chemistry ● Careers In Science ● Working In Chemistry ● Working in Physics ● Blood as a Mixture ● Blood Groups ● DNA Fingerprinting ● Fingerprints and Forensics ● Gel Electrophoresis ● Chromatography: Separating Colours ● Antarctica, a Shared Continent ● Carbon Capture ● Carbon Footprints ● CFCs and the Ozone Layer ● Climate and Weather ● Computer Modelling and the Environment ● El Nino and La Nina ● Examining Past Climate ● Human Influences on Climate ● If Climate Change is Real, How Come...? ● The Enhanced Greenhouse Effect

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- Disappearing Polar Ice
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- The Power Grid and You
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- Cool Robots
- Disaster Recovery Robots
- How Far Can Your Boots Walk?
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- Life on Mars
- Navigating for a Robot Boat
- Relief Bots
- Rescue Mission
- The Mass of an Email
- The Zombie Apocalypse Water Shortage
- A Limitless Source Of Energy
- Cleaning Up Our Litter
- Reclaiming our Climate
- Vertical Garden
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