



Strand 1: Biological Sciences

Through the exploration of the life cycles of select flora and fauna, students learn about basic needs for survival. Whilst investigating the innate ability of plants to adapt to their surrounding environments and the complexity of the human heart, students deepen their understanding of biology.

Topic	Year Level	Investigation	Related Clip	Worksheet
Life Cycles	4	Activity 1: Where Do They Come From?	Mushroom Spores	
		Activity 2: How Do They Grow?	Roots Down	Worksheet 1: How Do they Grow And Reproduce?
		Activity 3: Biodegradable Rubbish	Biodegradable Rubbish	Worksheet 2: Biodegradable Rubbish
		Activity 4: Making Fossils	Making Fossils	
Adaptations	5-6	Activity 1: Chased By A Drop	Chased By A Drop	
		Activity 2: Capillary Action	Water Down A Rope	Worksheet 1: Capillary Action
		Activity 3: Coloured Flowers	Coloured Flowers	
		Activity 4: Measure Leaf Water	Measure Leaf Water	Worksheet 2: Measure Leaf Water
Arthropods	7	Activity 1: Animals Galore	Bird Hide	
		Activity 2: Pit Traps	Pit Traps	Worksheet 1: Pit Traps
		Activity 3: Feeding Frenzy	Headache	Worksheet 2: Feeding Frenzy
		Activity 4: Catch And Classify	Bug Catcher	Worksheet 3: Catch And Classify
Circulation	8	Activity 1: Heart Starter	The Body's Strongest Muscle	Worksheet 1: The Body's Strongest Muscle
		Activity 2: The Stethoscope		Worksheet 2: The Stethoscope
		Activity 3: Lub Dub	Lub Dub	Worksheet 3: Lub Dub
		Activity 4: Lucky We Have Valves	The Heart As A Pump	Worksheet 4: The Heart As A Pump
		Activity 5: Finger On The Pulse	Finger On The Pulse	



Strand 2: Chemical Sciences

In examining objects that are made of materials with observable properties, students discover the effect of changes of state. Through the critical analysis of reversible and irreversible changes, students learn to correctly classify properties, with the aid of experiments that explore temperature changes and the characteristics of paper.

Topic	Year Level	Investigation	Related Clip	Worksheet
Material Madness	4	Activity 1: Introducing Material	Bungee Jumping Eggs Part A Bungee Jumping Eggs Part B Bungee Jumping Eggs Part C	Worksheet 1: Bungee Jumping Eggs
		Activity 2: Comparing The Properties Of Different Types Of Paper	Testing The Strength Of Hair	Worksheet 2: Comparing The Properties Of Different Types Of Paper
		Activity 3: Altering Properties	Using Paper To Make A Dog Lead	Worksheet 3: Testing Paper Strength
		Activity 4: Recycling Paper	Birthday Paper	
		Activity 5: Exploring Plastics		Worksheet 4: Examining Plastics
States of Matter	5	Activity 1: Introducing States Of Matter	Is Air Really There?	Worksheet 1: Properties Of Solids, Liquids and Gases Worksheet 2: Investigating Gases
		Activity 2: Changing State	Deep Frozen Disaster Overflow	Worksheet 3: Freezing And Melting Water
		Activity 3: Evaporating	Cool Drink	Worksheet 4: Investigating Evaporating
		Activity 4: Comparing Freezing Liquids	Frozen Oil Quick Freeze Ice Cream	
		Activity 5: An Unusual Substance		Worksheet 5: Making Slime
Reversible and Irreversible Changes	6	Activity 1: Applying A Change Of State	Collect Water	Worksheet 1: Applying Evaporating And Condensing
		Activity 2: Dissolving And Crystallising	Rock Candy	Worksheet 2: Investigating Dissolving And Crystallising
		Activity 3: Rusting	Bottled Heat	Worksheet 3: Investigating Conditions That Affect Rusting
		Activity 4: Making A Super Bouncing Ball	Super Bouncing Ball	Worksheet 4: Comparing Properties
		Activity 5: Distinguishing Between Reversible And Irreversible Change	Corn Starch Clay Solar Fruit Dryer Ice Cube Melt Off Clean Cola Disappearing Shell	



Strand 3: Physical Sciences

In this strand a variety of factors are explored to ascertain how objects move and why. Through the in-depth study of magnets, light and energy, students learn the importance of both the physical traits of objects and the effect of external forces. Students experiment with shadow puppets, electrical circuits, friction and rockets to classify materials and broaden their understanding of physical sciences.

Topic	Year Level	Investigation	Related Clip	Worksheet
Mysterious Magnets	4	Activity 1: Sticky Stuff	Iron Filings	Worksheet 1: Sticky Stuff Worksheet 2: Thinking About Magnets
		Activity 2: Finding Out About Magnets		Worksheet 3: Finding Out About Magnets Worksheet 2: Thinking About Magnets (from previous activity) Resource Sheet 1: Labels for Station Activities
		Activity 3: Magnetic Toys	Magnetic Snake Charmer Fishy Magnets Marble Statue Magnetic Pogo	Worksheet 4: Magnetic Toys Worksheet 2: Thinking About Magnets (from previous activity)
		Activity 4: How Far Is Too Far?	Chain Reaction Magnets	Worksheet 5: How Far Is Too Far? Worksheet 2: Thinking About Magnets (from previous activity)
		Activity 5: Magnetic UFO	Magnetic UFO	Worksheet 6: Magnetic UFO
Shadows and Colours	5	Activity 1: Shadow Materials	Dragon Shadow Puppet	Worksheet 1: Shadow Materials
		Activity 2: Shadow Puppets	Dragon Shadow Puppet	Worksheet 2: Shadow Puppets
		Activity 3: The Colours in Light	Light Catcher	Worksheet 3: The Colours in Light
		Activity 4: Colour My World	Colour My World	Worksheet 4: Colour My World
		Activity 5: Spooky Colour Spinner	Spooky Colour Spinner	Worksheet 5: Spooky Colour Spinner
Circulating Charges	6	Activity 1: Light It Up	Salt Power Part A Salt Power Part B Salt Power Part C	Worksheet 1: Light It Up
		Activity 2: Steady Hand Game	Steady Hand Game	Worksheet 2: Steady Hand Game
		Activity 3: Brilliant Burglar Alarm	Brilliant Burglar Alarm	Worksheet 3: Brilliant Burglar Alarm
		Activity 4: Electric Fruit and Vegetables	The Potato Clock	Worksheet 4: Electric Clock
		Activity 5: Pencil Telephone	Pencil Telephone	Worksheet 5: Pencil Telephone



Topic	Year Level	Investigation	Related Clip	Worksheet
Forces	7	Activity 1: Investigating Friction	Shoe Traction	Worksheet 1: Investigating Friction
		Activity 2: Exploring Air Pressure	Card Cup Bottle Crush Flying Wing	Worksheet 2: Air Pressure
		Activity 3: Investigating Air Resistance	Flying Stuntman Part A	Worksheet 3: Investigating Air Resistance
		Activity 4: Forces in Water	Flipper Propulsion Part A Flipper Propulsion Part B	Worksheet 4: Forces In Water
		Activity 5: Identifying Forces	Wax Your Skis Balloon Bottle Challenge Flying Stuntman Part B Table Cloth Tricks Snazzy Snow Shoes	
Energy Changes	8	Activity 1: Snappy Surprise	Snappy Surprise	Worksheet 1: Snappy Surprise
		Activity 2: Potentially Stretchy	Clothes Peg Shooter Part A Clothes Peg Shooter Part B Marshmallow Catapult	Worksheet 2: Potentially Stretchy
		Activity 3: Flying High	Stomp Rockets	Worksheet 3: Flying High
		Activity 4: Bouncing Balls	Bouncing Balls	Worksheet 4: Bouncing Balls