

Australian Science Content Map

Education Perfect Science is an online learning resource with scaffolded Smart Lessons aligned to the Australian Curriculum. This table aligns the lessons provided by Education Perfect mapped to the Australian Curriculum.

Year 7 Australian Curriculum	
Science Understanding	
Biological sciences	Education Perfect Lessons
Classification helps organise the diverse group of organisms (ACSSU111)	<p>Science Understanding</p> <p>Introduction to Classification</p> <p>Uses of Classification</p> <p>Living or Non-Living?</p> <p>MRS GREN</p> <p>Types of Keys</p> <p>Linnaean Classification</p> <p>Binomial Nomenclature</p> <p>Species and Hybrids</p> <p>Animal Phyla</p> <p>The Six Kingdoms</p> <p>Vertebrates</p> <p>Science as a Human Endeavour</p> <p>Carl Linnaeus</p> <p>Identifying Species</p> <p>Plant Divisions</p> <p>The Platypus</p> <p>Science Investigations</p> <p>Building Dichotomous Keys</p> <p>Classifying Leaves</p> <p>Researching Phyla</p> <p>Using Dichotomous Keys</p>
Interactions between organisms, including the effects of human activities can be represented by food chains and food webs (ACSSU112)	<p>Science Understanding</p> <p>Ecology</p> <p>Species vs Organism</p> <p>Ecosystem</p> <p>Biotic and Abiotic Factors</p> <p>Interdependent Relationships</p> <p>Predators, Prey and Competition</p> <p>Producers and Photosynthesis</p> <p>Consumers</p> <p>Food Chains</p> <p>Food Webs</p> <p>Adaptations</p> <p>Australian Bushfires</p> <p>Cane Toads as an Introduced Species</p> <p>Deforestation</p> <p>Diurnal vs Nocturnal</p>

	<p> Ecosystem Conservation Introduced Species Oil Pollution and Industrial Waste Pesticides Scientific Methods of Conservation Species Conservation Water Pollution Science as a Human Endeavour Antarctica Global Warming Introduced and Invasive Species Invasive Species in Australia Pollution Pollution and Ecosystems Saving the Tasmanian Devil Science Investigations Build a Food Web Collecting Invertebrates in Quadrats Extracting Leaf Pigments Growing Plants Under Different Conditions Measuring Abiotic Factors in Water </p>
<p>Chemical sciences</p>	<p>Education Perfect Lessons</p>
<p>Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques (ACSSU113)</p>	<p> Science Understanding Introduction to Mixtures Pure and Impure Substances Solute and Solvent Concentrations Suspensions Colloids Emulsions Introduction to Separation Filtration Centrifuging Evaporation Distillation Adsorption Chromatography Crystallisation Magnetic and Electrostatic Separation Separating Mixtures Science as a Human Endeavour Blood as a Mixture Indigenous Art using Mixtures Recycling Sewage Separation in Food Separation in Industries Water Treatment Science Investigations Candy Crystals Chromatography: Separating Colours Filtration </p>

	Making a Solar Still Separating a Basic Mixture Temperature and Dissolving
Earth and space sciences	Education Perfect Lessons
<p>Predictable phenomena on Earth, including seasons and eclipses, are caused by the relative positions of the sun, Earth and the moon (ACSSU115)</p>	<p>Science Understanding The Universe Gravity Comets Asteroids and Meteoroids Earth, Moon and Sun Day and Night Time Zones Seasons Phases Tides Lunar Eclipse Solar Eclipse Earth's Magnetic Field Earth's Structure Planetary Motion</p> <p>Science as a Human Endeavour Calendars and the Solar Year Exploring Space Indigenous Constellations Models of the Solar System Satellites Telescopes</p> <p>Science Investigations Making a Sundial Modelling Gravity Modelling the Earth, Moon and Sun Making a Pinhole Camera Using a Pinhole Camera to Calculate Diameter of the Sun Seasons and the Angle of the Sun</p>
<p>Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable (ACSSU116)</p>	<p>Science Understanding Introduction to Earth's Resources Renewable and Non-Renewable Energy Sources Fossil Fuels as a Resource Soil as a Resource Minerals and Ores as Resources Mining Nuclear Fuel as a Resource Living Things as a Resource Air as a Resource Wind as a Resource Wind Turbines Solar Energy Water Power Geothermal Energy Water on Earth</p>

	<p>The Water Cycle as a Closed System States of Water Water Cycle Influences on the Water Cycle Aquifers Desalination Irrigation Renewable vs Non-Renewable Resources: Coal vs Solar Power for Australia's Future Water Conservation Science as a Human Endeavour Antarctica, a Shared Continent Changing Seasons Renewable Energy Science, Tradition and Modern Medicine Water Management Science Investigations Evaporation Make Your Own Aquifer Solar Oven Turbine Power Weather in a Jar</p>
<p>Physical sciences</p>	<p>Education Perfect Lessons</p>
<p>Change to an object's motion is caused by unbalanced forces, including Earth's gravitational attraction, acting on the object (ACSSU117)</p>	<p>Science Understanding What are Forces? Drawing Forces Balanced and Unbalanced Forces Contact and Non-Contact Forces Magnetism Gravity Levers Inclined Planes Wheels, Axles and Pulleys Gears Bicycle Investigation Newton's First Law Newton's Second Law Newton's Third Law Calculating Net Force Earth's Magnetic Field Electrostatic Force Friction Gear Ratio Planetary Motion Tides Science as a Human Endeavour Ancient Tools and Weapons Comparing Robots Fact or Friction? Safety Systems Sports Science</p>

	<p>Science Investigations A Ramp as a Simple Machine Build a Marshmallow Blaster Build an Electroscope Friction Investigation Levers Mapping Magnetic Fields</p>
<p>Science as a Human Endeavour</p>	
<p>Nature and development of science</p>	<p>Education Perfect Lessons</p>
<p>Scientific knowledge has changed peoples' understanding of the world and is refined as new evidence becomes available (ACSHE119)</p>	<p>Biological sciences Carl Linnaeus Global Warming Identifying Species Earth and space sciences Calendars and the Solar Year Exploring Space Models of the Solar System Satellites Science, Tradition and Modern Medicine Telescopes Physical sciences Comparing Robots</p>
<p>Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures (ACSHE223)</p>	<p>Biological sciences Antarctica Plant Divisions The Platypus Chemical sciences Indigenous Art using Mixtures Earth and space sciences Antarctica, a Shared Continent Changing Seasons Indigenous Constellations Renewable Energy Science, Tradition and Modern Medicine Water Management</p>
<p>Use and influence of science</p>	<p>Education Perfect Lessons</p>
<p>Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120)</p>	<p>Biological sciences Global Warming Introduced and Invasive Species Invasive Species in Australia Pollution Pollution and Ecosystems Saving the Tasmanian Devil Chemical sciences Blood as a Mixture Recycling Sewage Water Treatment</p>

	<p>Earth and space sciences Water Management Physical sciences Safety Systems</p>
<p>People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE121)</p>	<p>Biological sciences Saving the Tasmanian Devil Chemical sciences Blood as a Mixture Recycling Sewage Separation in Food Separation in Industries Water Treatment Earth and space sciences Changing Seasons Science, Tradition and Modern Medicine Water Management Physical sciences Ancient Tools and Weapons Comparing Robots Fact or Friction? Sports Science</p>
<p>Science Inquiry Skills</p>	
<p>Questioning and predicting</p>	<p>Education Perfect Lessons</p>
<p>Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge (ACSIS124)</p>	<p>Science Investigations Researching Phyla Growing Plants Under Different Conditions Measuring Abiotic Factors in Water Filtration Separating a Basic Mixture Solar Oven A Ramp as a Simple Machine Build a Marshmallow Blaster Friction Investigation Science Inquiry Skills Lessons Hypothesising and Predicting</p>
<p>Planning and conducting</p>	<p>Education Perfect Lessons</p>
<p>Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed (ACSIS125)</p>	<p>Science Investigations Building Dichotomous Keys Classifying Leaves Researching Phyla Build a Food Web Collecting Invertebrates in Quadrats Extracting Leaf Pigments Growing Plants Under Different Conditions Measuring Abiotic Factors in Water Candy Crystals Chromatography: Separating Colours</p>

	<p> Filtration Making a Solar Still Separating a Basic Mixture Temperature and Dissolving Making a Sundial Modelling Gravity Modelling the Earth, Moon and Sun Making a Pinhole Camera Using a Pinhole Camera to Calculate Diameter of the Sun Seasons and the Angle of the Sun Evaporation Make Your Own Aquifer Solar Oven Turbine Power Weather in a Jar A Ramp as a Simple Machine Build a Marshmallow Blaster Build an Electroscope Friction Investigation Levers Mapping Magnetic Fields Science Inquiry Skills Lessons Bunsen Burner Equipment Types Organising Data into a Data Table from an Experiment Safety Equipment Separating Substances and Other Equipment Magnification Parts and Function of a Microscope Types of Microscopes Using a Microscope </p>
<p>Measure and control variables, select equipment appropriate to the task and collect data with accuracy (ACSIS126)</p>	<p> Science Investigations Collecting Invertebrates in Quadrats Growing Plants Under Different Conditions Measuring Abiotic Factors in Water Filtration Separating a Basic Mixture Using a Pinhole Camera to Calculate Diameter of the Sun Seasons and the Angle of the Sun Evaporation Solar Oven A Ramp as a Simple Machine Build a Marshmallow Blaster Friction Investigation Levers Science Inquiry Skills Lessons Accuracy Control Variables and Control Groups Fair Tests Repeatability and Reliability Sample Size Validity </p>

	Variables Measuring Electricity Measuring in Science Reading the Meniscus
Processing and analysing data and information	Education Perfect Lessons
<p>Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships in data using digital technologies as appropriate (ACSIS129)</p>	<p>Science Investigations Building Dichotomous Keys Classifying Leaves Using Dichotomous Keys Build a Food Web Collecting Invertebrates in Quadrats Extracting Leaf Pigments Growing Plants Under Different Conditions Modelling Gravity Seasons and the Angle of the Sun Evaporation Solar Oven A Ramp as a Simple Machine Build a Marshmallow Blaster Friction Investigation Levers Mapping Magnetic Fields</p> <p>Science Inquiry Skills Lessons Algebra - Algebra in Science Algebra - Rearranging Equations Interpreting Data Tables Matching Tables to Graphs Choosing Appropriate Units Units of Distance Units of Energy Units of Speed Units of Volume Scientific Notation Significant Figures Interpreting Scale</p>
<p>Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence (ACSIS130)</p>	<p>Science Investigations Using Dichotomous Keys Build a Food Web Collecting Invertebrates in Quadrats Growing Plants Under Different Conditions Measuring Abiotic Factors in Water Filtration Solar Oven Build a Marshmallow Blaster</p> <p>Science Inquiry Skills Lessons Food Webs Interpreting Diagrams Water Cycle Bar Graphs</p>

	Line Graphs Scatter Graphs
Evaluating	Education Perfect Lessons
<p>Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements (ACSIS131)</p>	<p>Science Investigations Building Dichotomous Keys Classifying Leaves Collecting Invertebrates in Quadrats Growing Plants Under Different Conditions Measuring Abiotic Factors in Water Candy Crystals Chromatography: Separating Colours Making a Solar Still Separating a Basic Mixture Temperature and Dissolving Making a Sundial Modelling Gravity Modelling the Earth, Moon and Sun Making a Pinhole Camera Using a Pinhole Camera to Calculate Diameter of the Sun Seasons and the Angle of the Sun Evaporation Make Your Own Aquifer Solar Oven Turbine Power Weather in a Jar A Ramp as a Simple Machine Build a Marshmallow Blaster Build an Electroscope Friction Investigation Levers Mapping Magnetic Fields Science Inquiry Skills Lessons Evaluating in Science</p>
<p>Use scientific knowledge and findings from investigations to evaluate claims based on evidence (ACSIS132)</p>	<p>Science Investigations Collecting Invertebrates in Quadrats Extracting Leaf Pigments Temperature and Dissolving Modelling Gravity Modelling the Earth, Moon and Sun Using a Pinhole Camera to Calculate Diameter of the Sun Seasons and the Angle of the Sun Evaporation Make Your Own Aquifer Build a Marshmallow Blaster</p>
Communicating	Education Perfect Lessons
<p>Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital</p>	<p>Science Investigations Classifying Leaves Researching Phyla</p>

technologies as appropriate ([AC SIS133](#))

[Using a Pinhole Camera to Calculate Diameter of the Sun](#)

Science Inquiry Skills Lessons

[Graphs in Science](#)

[Observations and Inferences](#)

[Scientific Method](#)