The Australian Curriculum

Subjects	Science
Year levels	Year 3

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Year 3 Content Descriptions

Science Understanding

Biological sciences

Living things can be grouped on the basis of observable features and can be distinguished from non-living things (ACSSU044 - Scootle)

Elaborations

recognising characteristics of living things such as growing, moving, sensitivity and reproducing

recognising the range of different living things

sorting living and non-living things based on characteristics

exploring differences between living, once living and products of living things

Chemical sciences

A change of state between solid and liquid can be caused by adding or removing heat (ACSSU046 - Scootle)

Elaborations

investigating how liquids and solids respond to changes in temperature, for example water changing to ice, or melting chocolate

exploring how changes from solid to liquid and liquid to solid can help us recycle materials

predicting the effect of heat on different materials

Earth and space sciences

Earth's rotation on its axis causes regular changes, including night and day (ACSSU048 - Scootle)

Elaborations

recognising the sun as a source of light

constructing sundials and investigating how they work

describing timescales for the rotation of the Earth

modelling the relative sizes and movement of the sun, Earth and moon

Physical sciences

Heat can be produced in many ways and can move from one object to another (ACSSU049 - Scootle)

Elaborations

describing how heat can be produced such as through friction or motion, electricity or chemically (burning)

identifying changes that occur in everyday situations due to heating and cooling

exploring how heat can be transferred through conduction

recognising that we can feel heat and measure its effects using a thermometer

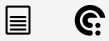
Science as a Human Endeavour

Nature and development of science

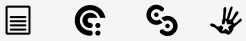
Science involves making predictions and describing patterns and relationships (ACSHE050 - Scootle)

Elaborations

making predictions about change and events in our environment



researching how knowledge of astronomy has been used by some Aboriginal and Torres Strait Islander people



considering how posing questions helps us plan for the future

Use and influence of science

Science knowledge helps people to understand the effect of their actions (ACSHE051 - Scootle)

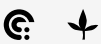
Elaborations

considering how heating affects materials used in everyday life

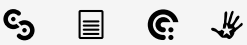
investigating how science helps people such as nurses, doctors, dentists, mechanics and gardeners

considering how materials including solids and liquids affect the environment in different ways

deciding what characteristics make a material a pollutant



researching Aboriginal and Torres Strait Islander people's knowledge of the local natural environment, such as the characteristics of plants and animals



Science Inquiry Skills

Questioning and predicting

With guidance, identify questions in familiar contexts that can be investigated scientifically and make predictions based on prior knowledge (ACSIS053 - Scootle)

Elaborations

choosing questions to investigate from a list of possibilities

jointly constructing questions that may form the basis for investigation

listing shared experiences as a whole class and identifying possible investigations

working in groups to discuss things that might happen during an investigation

Planning and conducting

With guidance, plan and conduct scientific investigations to find answers to questions, considering the safe use of appropriate materials and equipment (ACSIS054 - Scootle)

Elaborations

working with teacher guidance to plan investigations to test simple cause-and-effect relationships

discussing as a whole class ways to investigate questions and evaluating which ways might be most successful

discussing safety rules for equipment and procedures

Consider the elements of fair tests and use formal measurements and digital technologies as appropriate, to make and record observations accurately (ACSIS055 - Scootle)

Elaborations

recording measurements using familiar formal units and appropriate abbreviations, such as seconds (s), grams (g), centimetres (cm)

using a variety of tools to make observations, such as digital cameras, thermometers, rulers and scales

Processing and analysing data and information

Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends (ACSIS057 - Scootle)

Elaborations

using provided tables to organise materials and objects based on observable properties

discussing how to graph data presented in a table

identifying and discussing numerical and visual patterns in data collected from students' own investigations and from secondary sources

Compare results with predictions, suggesting possible reasons for findings (ACSIS215 - Scootle)

Elaborations

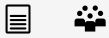
discussing how well predictions matched results from an investigation and sharing ideas about what was learnt

Evaluating

Reflect on investigations, including whether a test was fair or not (ACSIS058 - Scootle)

Elaborations

describing experiences of carrying out investigations to the teacher, small group or whole class



discussing as a whole class the idea of fairness in testing

Communicating

Represent and communicate observations, ideas and findings using formal and informal representations (ACSIS060 - Scootle)

Elaborations

communicating with other students carrying out similar investigations to share experiences and improve investigation skill

exploring different ways to show processes and relationships through diagrams, models and role play

using simple explanations and arguments, reports or graphical representations to communicate ideas to other students