

Curriculum links

Indigenous STEM Education Resources

Cultural Burning

NSW Curriculum links

Stage 4

Living Systems

SC4-LIV-01

Describes the role, structure and function of a range of living systems and their components.

Ecosystems

Identify the components that make up an ecosystem.

Investigate the interactions of biotic and abiotic factors in an ecosystem.

Observing the Universe

SC4-OTU-01

Explains how observations are used by scientists to increase knowledge and understanding of the Universe.

Working Scientifically

Observing

SC4-WS-01

Uses scientific tools and instruments for observations.

Questioning and predicting

SC4-WS-02

Identifies questions and makes predictions to guide scientific investigations.

Conducting investigations

SC4-WS-04

Follows a planned procedure to undertake safe and valid investigations.

Processing data and information

SC4-WS-05

Uses a variety of ways to process and represent data.

Analysing data and information

SC4-WS-06

Uses data to identify trends, patterns and relationships, and draw conclusions.

Communicating

SC4-WS-08

Communicates scientific concepts and ideas using a range of communication forms.

Can be adapted for:

Stage 2

Physical and living systems depend on energy

ST2-SCI-01

Uses information to investigate the solar system and the effects of energy on living, physical and geological systems.

Living things depend on energy and materials to survive

Describe the relationship between habitat, ecosystem and environment.

Observe and describe living and non-living things in a habitat.

Pose questions to conduct fair tests to determine the effects of soil, water and light energy on plants.

Describe how Aboriginal and/or Torres Strait Islander Peoples' practices support habitats to survive

Stage 3

Knowledge of our world and beyond inspires sustainable solutions

ST3-SCI-01

Uses evidence to explain how scientific knowledge can be used to develop sustainable practices.

Living things may change over millions of years, in response to their environments

Examine evidence that environments have changed over time and continue to change.

Describe how Aboriginal and/or Torres Strait Islander Peoples' sustainable practices continue to protect the environment.

Stage 5

SC5-ENV-01

Analyses the impact of human activity on the natural world.

Alternative resource use and recycling

Research how Aboriginal and Torres Strait Islander Peoples have developed sustainable harvesting practices and Cultural protocols based on deep ecological understandings.

Australian Curriculum links

Year 7

Science understanding

Biological sciences

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.

Science and a human endeavour

Nature and development of science

AC9S7H02

Investigate how cultural perspectives and world views influence the development of scientific knowledge.

Use and influence of science

AC9S7H03

Examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations.

Science inquiry

Questioning and predicting

AC9S7I01

Develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships.

Planning and conducting

AC9S7I02

Plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place.

Processing, modelling and analysing

AC9S7I04

Select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information.

AC9S7I05

Analyse data and information to describe patterns, trends and relationships and identify anomalies.

Evaluating**AC9S7I06**

Analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions.

AC9S7I07

Construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information.

Communicating**AC9S7I08**

Write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate.

Can be adapted for:

Year 3

Science understanding**Biological sciences****AC9S3U01**

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals.