7–8

Year 7

Science

Investigate the role of classification in ordering and organising the diversity of life on Earth and use and develop classification tools including dichotomous keys (AC9S7U01)

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 (AC9S7U02)

Geography

Classification of environmental resources and the way that water connects and changes places as it moves through environments (AC9HG7K01)

Design & Technologies

Analyse how food and fibre are produced in managed environments and how these can become sustainable (AC9TDE8K04)

Year 8

Geography

The location and distribution of Australia's distinctive landscapes and significant landforms (AC9HG8K02)

Design & Technologies

Analyse how food and fibre are produced in managed environments and how these can become sustainable (AC9TDE8K04)

Skills

Science

Select and use equipment to generate and record data with precision, using digital tools as appropriate (AC9S7I03)

Select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information (AC9S7I04)

Geography

Collect, organise and represent data and information from primary research methods, including fieldwork and secondary research materials, using geospatial technologies and digital tools as appropriate (AC9HG7S02/AC9HG8S02)

Interpret and analyse geographical data and information to identify similarities and differences, explain patterns and trends and infer relationships (AC9HG7S03/AC9HG8S03)

Identify a strategy for action in relation to environmental, economic, social or other factors, and explain potential impacts (AC9HG7S05/AC9HG8S05)

Food Webs
Build a Tasmanian food web to explore how energy flows through forest ecosystems.
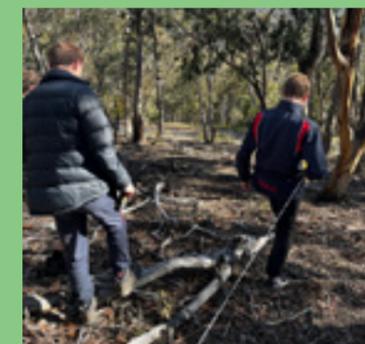

Invertebrate Classification
Discover the diversity of invertebrate species found in rotting logs using a dichotomous key. Understand the important role decomposers play in forest ecosystems.

9–10

Year 9

Science

Represent the carbon cycle and examine how key processes including combustion, photosynthesis and respiration rely on interactions between Earth's spheres (AC9S9U03)

Geography

The distribution and characteristics of biomes as regions with distinctive climates, soils, vegetation and productivity (AC9HG9K01)

The effects on environments of human alteration of biomes to produce food, industrial materials and fibres (AC9HG9K02)

Year 10

Geography

The human-induced changes that challenge the sustainability of places and environments (AC9HG10K01)

The environmental world views of people and their implications for environmental management (AC9HG10K02)

First Nations Australians' approaches to custodial responsibility and environmental management in different regions of Australia (AC9HG10K03)

Causes and effects of a change in an identified environment at a local, national or global scale, and strategies to manage sustainability (AC9HG10K04)

Design & Technologies

Analyse and make judgements on the ethical, secure and sustainable production and marketing of food and fibre enterprises (AC9TDE10K04)

Skills

Science

Select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate (AC9S9I03)

Select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information (AC9S9I04)

Geography

Collect, represent and compare data and information from primary research methods, including fieldwork and secondary research materials, using geospatial technologies and digital tools as appropriate (AC9HG9S02/AC9HG10S02)

Develop and evaluate strategies using environmental, economic or social criteria; recommend a strategy and explain the predicted impacts (AC9HG9S05/AC9HG10S05)

Data Collection - Forest Ecosystems
Use scientific equipment and field work skills to collect abiotic and biotic data in a forest ecosystem.

Vegetation Transect
Conduct a transect to determine the distribution, abundance and size of dominant tree species in a forest environment.