Environmental change and management

## Focus

Environments

## Overview

Students investigate the source, sink, service and spiritual functions of natural environments.

Duration – 2 lessons

## Content

Students:

* investigate the role and importance of natural environments, for example:
  + identification of the function of natural environments in supporting life
  + application of the function of natural environments.

Key inquiry question

How do environments function?

### Stage 5 outcomes

A student:

* explains processes and influences that form and transform places and environments GE5-2
* analyses the effect of interactions and connections between people, places and environments GE5-3
* acquires and processes geographical information by selecting and using appropriate and relevant geographical tools for inquiry GE5-7
* communicates geographical information to a range of audiences using a variety of strategies GE5-8

### Learning across the curriculum content

* Critical and creative thinking
* Ethical understanding
* ICT
* Literacy
* Civics and citizenship
* Sustainability

[Geography K-10 syllabus](https://syllabus.nesa.nsw.edu.au/hsie/geography-k10/content/) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2015

## Learning progressions – literacy

### Writing

| Sub-element | Indicators |
| --- | --- |
| Creating texts (CrT) | CrT8, CrT9, CrT10 |
| Grammar (GrA1)\* |  |
| Punctuation (PuN)\* |  |
| Spelling (SpG)\* |  |
| Handwriting and keyboarding (HwK)\* |  |

### Reading and viewing

| Sub-element | Indicators |
| --- | --- |
| Understanding texts (UnT) | UnT8, UnT9 |
| Phonological awareness (PhA)  Phonic knowledge and word recognition (PKW) | These are constrained skills gained in the early years of learning. There may be students who are identified as needing individual assistance with PhA and PKW in the secondary years. These students must be referred to the LaST for further intervention. |
| Fluency (FlY)\* |  |

### Speaking and listening

| Sub-element | Indicators |
| --- | --- |
| Listening (LiS) |  |
| Interacting (InT) |  |
| Speaking (SpK) |  |

## Learning progressions – numeracy

### Number sense and algebra

| Sub-element | Indicators |
| --- | --- |
| Quantifying numbers (QuN) |  |
| Additive strategies (AdS) |  |
| Multiplicative strategies (MuS) |  |
| Operating with decimals (OpD) |  |
| Operating with percentages (OpP) |  |
| Understanding money (UnM) |  |
| Number patterns and algebraic thinking (NPA) |  |
| Interpreting fractions (InF) |  |
| Comparing units (CoU) |  |

### Measurement and geometry

| Sub-element | Indicators |
| --- | --- |
| Measuring time (MeT) |  |
| Positioning and locating (PoL) |  |
| Understanding geometric properties (UGP) |  |
| Understanding units of measurement (UUM) |  |

### Statistics and probability

| Sub-element | Indicators |
| --- | --- |
| Interpreting and representing data (IRD) |  |
| Understanding chance (UnC) |  |

Note – indicators for the sub-elements in red\* can be identified once work samples from students have been collected and analysed.

## Teaching and learning activity

Using the Australian Geography Teachers’ Association [Environmental Change](https://www.geogspace.edu.au/core-units/years-9-10/exemplars/year-10/y10-exemplars-y10-illus2.html) worksheet, complete the following activities:

* 1. read the information sheet and discuss each of the different natural functions of the environment
  2. define each of the following key natural functions - source, sink, service and spiritual
  3. apply each natural function to an environment of choice and create an infographic to show understanding (formative assessment).

### Evaluate

**Formative feedback**

* Student/teacher conferencing of students’ ability to apply their geographic knowledge and understanding to an environments’ natural functions.
* Presentation of visual representation of the functions applied to a natural environment.

**Summative feedback**

* Assessment task.

### Assessment for learning

**Created infographic**

* Choose an environment to demonstrate an understanding and application of the functions of a natural environment
* Explain the natural functions to a group/class.
* In the infographic, students should:

1. name their chosen environment
2. organise their information suitably, both verbally and in writing
3. give explicit details of the natural functions, and specific examples for the chosen environment
4. use associated metalanguage.

### Linking to the learning progression indicators (observable behaviours)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Indicator | Where to next (indicator) | Suggested learning activity |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |