# Australian Curriculum Mapping: 2040 – Exploring Climate Change – Science – Years 9 & 10

## **Year 9 Science**

* Formulate questions or hypotheses that can be investigated scientifically [(ACSIS164)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12009&elaborations=true&cd=ACSIS164&searchTerm=ACSIS164#dimension-content)
* Plan, select and use appropriate investigation types, including field work and laboratory experimentation, to collect reliable data; assess risk and address ethical issues associated with these methods [(ACSIS165)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12009&elaborations=true&cd=ACSIS165&searchTerm=ACSIS165#dimension-content)

## **Year 10 Science**

* Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere [(ACSSU189)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12010&elaborations=true&cd=ACSSU189&searchTerm=ACSSU189#dimension-content)
* Formulate questions or hypotheses that can be investigated scientifically [(ACSIS198)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12010&elaborations=true&cd=ACSIS198&searchTerm=ACSIS198#dimension-content)
* Plan, select and use appropriate investigation types, including field work and laboratory experimentation, to collect reliable data; assess risk and address ethical issues associated with these methods [(ACSIS199)](https://www.australiancurriculum.edu.au/f-10-curriculum/science/?strand=Science+Understanding&strand=Science+as+a+Human+Endeavour&strand=Science+Inquiry+Skills&capability=ignore&priority=ignore&year=12010&elaborations=true&cd=ACSIS199&searchTerm=ACSIS199#dimension-content)

## **Relevant parts of Year 9 Science achievement standards**

* Students design questions that can be investigated using a range of inquiry skills. They design methods that include the control and accurate measurement of variables and systematic collection of data.

## **Relevant parts of Year 10 Science achievement standards**

* Students describe and analyse interactions and cycles within and between Earth’s spheres. They develop questions and hypotheses and independently design and improve appropriate methods of investigation, including field work and laboratory experimentation.

**Syllabus outcomes:**[SC5-4WS, SC5-5WS, SC5-6WS, SC5-12ES](http://syllabus.bostes.nsw.edu.au/science/science-k10/outcomes/)

**General capabilities:** [Critical and Creative Thinking](https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/)

**Cross-curriculum priority:**[Sustainability OI.1](https://www.australiancurriculum.edu.au/f-10-curriculum/cross-curriculum-priorities/sustainability/)