

# MISEP Workshop Curriculum Links

## Years 9 & 10

- Science as a Human Endeavour
  - Use and Influence of Science
    - Analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society AC9S9H0 (Year 9) AC9S10H03 (Year 10)
    - Students learn that communication of scientific knowledge has a role in informing individual viewpoints, and community policies and regulations VC2S8H04 (Years 9 and 10)
  - Nature and Development of Science
    - Students learn that multidisciplinary endeavours to advance scientific knowledge make use of people's different perspectives and worldviews VC2S8H02 (Years 9 and 10)
- Science Enquiry
  - Questioning and Predicting
    - Develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models AC9S9I01 (Year 9) AC9S10I01 (Year 10)
    - Students learn about investigable questions, reasoned predictions and hypotheses can be used in guiding investigations to test and develop explanatory models and relationships VC2S10I01 (Years 9 and 10)
  - Planning and Conducting
    - Plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place AC9S9I02 (Year 9) AC9S10I02 (Year 10)
    - Students learn that valid, reproducible investigations to answer questions and test hypotheses can be planned and conducted, including identifying and controlling for possible sources of error and bias in sampling or in making observations; safe, ethical investigations include undertaking risk assessments and following protocols when accessing cultural sites and artefacts on Country and Place VC2S10I02 (Years 9 and 10)

## Years 7 & 8

- Science as a Human Endeavour
  - Explain how new evidence or different perspectives can lead to changes in scientific knowledge AC9S7H01 AC9S8H01
  - Investigate how cultural perspectives and world views influence the development of scientific knowledge AC9S7H02 AC9S8H02
  - Explore the role of science communication in informing individual viewpoints and community policies and regulations AC9S7H04 AC9S8H03
  - Scientific knowledge and understanding of the world changes as new evidence becomes available; science knowledge can develop through collaboration and connecting ideas across the disciplines and practice of science VCSSU089
  - Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations VCSSU090
  - Examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations AC9S7H03 (Year 7 only)
- Science Understanding
  - Model cyclic changes in the relative positions of the Earth, sun and moon and explain how these cycles cause eclipses and influence predictable phenomena on Earth, including seasons and tides AC9S7U03 (Year 7 only)
  - 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 (Year 7 only)
  - Interactions between organisms can be described in terms of food chains and food webs and can be affected by human activity VCSSU093
- Science Inquiry
  - Develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships AC9S7I01 AC9S8I01
  - Identify questions, problems and claims that can be investigated scientifically and make predictions based on scientific knowledge VCSIS107

## Years 5 & 6

- Science as a Human Endeavour
  - Nature and Development of Science:
    - Students examine why advances in science are often the result of collaboration or build on the work of others AC9S5H01 (Year 5) AC9S6H01 (Year 6)
    - Students learn scientific knowledge changes over time, often resulting from collaboration or by building on the work of others, and leads to advances in science VC2S6H01 (Years 5 and 6)
- Science Understanding
  - Biological Sciences:
    - Students examine how particular structural features and behaviours of living things enable their survival in specific habitats AC9S5U01 (Year 5)
    - Students investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions AC9S6U01 (Year 6)
    - Students learn that habitats can be described by their physical conditions; changing the physical conditions of a habitat, including by human activity, may affect the growth and survival of organisms VC2S6U01 (Years 5 and 6)
- Science Inquiry
  - Questioning and Predicting:
    - Pose investigable questions to identify patterns and test relationships and make reasoned predictions AC9S5I01 (Year 5) AC9S6I01 (Year 6)
    - Students learn that investigable questions and reasoned predictions can be used in guiding investigations to identify patterns and test relationships VC2S6I01 (Years 5 and 6)
  - Planning and Conducting:
    - Students learn that repeatable scientific investigations to answer questions can be planned and conducted, including, as appropriate, deciding the variables to be changed, measured and controlled in fair tests, considering potential risks, planning for the safe and ethical use of equipment and materials, and obtaining permissions for investigations conducted on Country and Place or in protected areas VC2S6I02 (Years 5 and 6)