



Unit Outline Year 7 Semester 1 2026

Science

Course Description and aims

With inquiry at the core, the MYP sciences framework aims to guide students to independently and collaboratively investigate issues through research, observation and experimentation. The MYP sciences curriculum explores the connections between science and everyday life. As they investigate real examples of science applications, students discover the tensions and dependencies between science and morality, ethics, culture, economics, politics, and the environment. Scientific inquiry fosters critical and creative thinking about research and design, as well as the identification of assumptions and alternative explanations. Students learn to appreciate and respect the ideas of others, gain good ethical-reasoning skills and further develop their sense of responsibility as members of local and global communities.

MYP Assessment criteria

Criterion A: Knowing and understanding

Students develop scientific knowledge (facts, ideas, concepts, processes, laws, principles, models and theories) and apply it to solve problems and express scientifically supported judgments.

Criterion B: Inquiring and designing

Students develop intellectual and practical skills through designing, analysing and performing scientific investigations.

Criterion C: Processing and evaluating

Students collect, process and interpret qualitative and/or quantitative data, and explain conclusions that have been appropriately reached.

Criterion D: Reflecting on the impacts of science

Students evaluate the implications of scientific developments and their applications to a specific problem or issue. Varied scientific language is applied to demonstrate understanding. Students should become aware of the importance of documenting the work of others when communicating in science.

Course Outline

In Semester One, Year 7 students will explain how biological diversity is ordered and organised. They use particle theory to explain the physical properties of substances and develop processes that separate mixtures.

In Term One, students investigate the role of classification in ordering and organising the diversity of life on Earth and use and develop classification tools including dichotomous keys. Students will 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. Students develop their research and communication skills by evaluating human impacts and disruptions on ecosystems using online sources and data.

In Term Two, students use particle theory to describe the arrangement of particles in a substance, including the motion of and attraction between particles, and relate this to the properties of the substance. Students plan and conduct safe, reproducible investigations to test relationships and aspects of scientific models through a summative practical report. They select and construct appropriate representations to organise data and information.

Assessment Tasks

Assessment Task	Due*
Science Safety Test (Crit A)	Week 5
Water is Life Research Assignment (Crit D)	Week 12 (Hand out Week 9)
Water is Life Practical Assignment (Crit B & Crit C)	Week 16 (Hand out Week 14)
Water is Life Test (Crit A)	Week 17

**Due date subject to change at classroom teacher discretion.*

Approaches to Learning

Communication, Information Literacy, Critical Thinking, Self- Management and Collaboration Skills.

Australian Curriculum Achievement Standard

The Achievement Standard for Year 7 Science is based on the Australian Curriculum v9

<https://www.australiancurriculum.edu.au/>