

Year 9 Science

Semester 1 Course Outline

Students consider the operation of systems at a range of scales. They explore ways in which the human body as a system responds to its external environment. Students will be introduced to the concept of the conservation of matter and begin to develop a more sophisticated view of energy transfer. They begin to apply their understanding of energy and forces to global systems such as continental movement.

Learning Outcomes

- 9.412 Explains chemical processes and natural radioactivity in terms of atoms and energy transfers and describes examples of important chemical reactions
- 9.414 Explains global features and events in terms of geological processes and timescales
- 9.415 Analyses how biological systems function and respond to external changes with reference to interdependencies, energy transfers and flows of matter
- 9.416 Describes social and technological factors that have influenced scientific developments and predicts how future applications of science and technology may affect people's lives
- 9.417 Designs questions that can be investigated using a range of inquiry skills
- 9.418 Designs methods that include the control and accurate measurement of variables and systematic collection of data and describes how ethics and safety were considered
- 9.419 Analyses trends in data, identifies relationships between variables and reveals inconsistencies in results
- 9.420 Analyses methods used and the quality of data personally collected, and explains specific actions to improve the quality of evidence
- 9.421 Evaluates others' methods and explanations from a scientific perspective and uses appropriate language and representations when communicating findings and ideas to specific audiences

Assessment Tasks

Students will be assessed on their participation and completion of classwork and assessment tasks.

Task	Week Due*
Topic tests (Atom structure and Chemical reactions)	Term 1, Week 5 Term 1, Week 9
Scientific report on Cold Packs	Term 1, Week 9
Topic test (Plate tectonics and Ecosystems)	Term 2, Week 5 Term 2, Week 9
Research task on GPS	Term 2, Week 3

*Due dates are an estimate only

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