

# Year 9 Science P Program

## Semester 2 Course Outline

This semester students will explore Chemistry and Physics topics. They will develop their knowledge of the particle model into an understanding of atomic structure, explaining how radioactivity arises from this structure, and demonstrate how a range of common chemical reactions arise as the result of the rearrangement of different atoms. Students will then examine how energy is transferred through different media as in waves and particles as light, sound and heat. The Learning Outcomes for this course have been personalised to suit the individual's learning program.

### Learning Outcomes

Students will be assessed on the following Learning Outcomes:

- Year.9.412 Explains chemical processes and natural radioactivity in terms of atoms and energy transfers and describes examples of important chemical reactions
- **Year.8.399 Compares physical and chemical changes and uses the particle model to explain and predict the properties and behaviours of substances**
- Year.9.413 Describes models of energy transfer and applies these to explain phenomena. **Year.8.400 Identifies different forms of energy and describes how energy transfers and transformations cause change in simple systems**
- Year 9.417 Designs questions that can be investigated using a range of inquiry skills. **Year.7.393 Identifies questions that can be investigated scientifically**
- Year 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.
- **Year.7.394 Plans fair experimental methods, identifying variables to be changed and measured**
- Year.9.420 Analyses methods used and the quality of data personally collected, and explains specific actions to improve the quality of evidence. **Year.7.395 Selects equipment that improves fairness and accuracy and describes how safety was considered**
- Year 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. **Year.7.398 Communicates ideas, methods and findings using scientific language and appropriate representations**

### Assessment Tasks

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

Task	Week Due*
Laboratory Report: <a href="#">Hot and Cold Pack</a>	Week 6 Term 3
Design Task: Build a solar oven	Week 4 Term 4

C		Ongoing
C		Ongoing
	Formative Assessments	Ongoing class work

\*Due dates are an estimate only

**Teacher/s:** Farhat Azad, Stephen Mckellar, Pinky Munshi, Alan Giles, Samantha Way, Deborah Lovatt and Wayne Smith

**Executive Teacher:** Darren King