



# CANBERRA HIGH SCHOOL - Learning overview for Term 1

## Subject: Science

During Term 1, Year 9 will be exploring Chemical Sciences.

In Science, students develop proficiency in; understanding, human endeavour and inquiry skills.

Students build and consolidate skills in:

- Problem solving
- Planning and conducting scientific investigations
- Investigating and constructing lab reports
- Analysing and applying data
- Understanding the relationships between scientific research, society, environment and technological developments

Most Work will be available through the Google Classroom and is expected to be completed in this platform. If you have any queries about the work posted on google classroom please contact teachers via email.

Week	Topic	Content/Activity/Tasks
1	Revision	<ul style="list-style-type: none"><li>• Revising the particle model of matter</li><li>• Describing physical and chemical changes</li><li>• Elements, compounds, and mixtures</li></ul>
2	Using the Atomic Model	<ul style="list-style-type: none"><li>• All matter is composed of atoms</li><li>• Atoms consist of protons, neutron, and electrons</li><li>• Drawing Bohr Diagrams</li></ul>
3	History of the atomic structure (AST)	<ul style="list-style-type: none"><li>• Describe the social and technological factors that have influenced the scientific development of atomic theory and how are science currently continuing to understand matter</li></ul>
4	Forming Ions	<ul style="list-style-type: none"><li>• Introduction to the formation of ions due to electron exchange</li></ul>
5	Isotopes & radioactivity	<ul style="list-style-type: none"><li>• Describe that isotopes are variation of an element that differ in the number of neutrons</li><li>• Unstable isotopes breakdown via nuclear radiation</li></ul>
6	Modeling Radioactive Decay Test	<ul style="list-style-type: none"><li>• Predict the half-lives of isotopes</li><li>• Explain that half-life is a measure decay based on nuclear stability</li></ul>
7	Chemical Reactions	<ul style="list-style-type: none"><li>• Chemical &amp; Physical Change (revision Yr 8)</li><li>• Simple word equations</li><li>• Introduction to chemical formula</li></ul>



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8	Chemical Reactions	<ul style="list-style-type: none"><li>● Conservation of mass</li><li>● Exothermic and Endothermic Reactions</li><li>● Combustions</li></ul>
9	Acid/Base Reactions	<ul style="list-style-type: none"><li>● Characteristics of acids and bases</li><li>● Measurement of acids and bases using pH scale and indicators</li></ul>