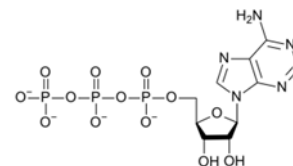




# Year 10 Core Science



## Overview

Core Science is compulsory in year 10. The course builds on the knowledge and skills developed in previous years. Core Science conforms to the Australian Curriculum where students learn scientific experimental and research skills and study scientific theory.

Students explore the biological, chemical, geological and physical evidence for different theories, such as the theories of natural selection and the Big Bang. Atomic theory is developed to understand relationships within the periodic table and students will discover that motion and forces are related by applying physical laws and formulae.

Students apply this knowledge to systems on a local and global scale which enables them to predict how changes will affect the world in which we live.



Students wishing to continue studying science subjects in years 11 and 12 should perform well in core science in year 10. *Science Investigations* is an elective year 10 science subject which assists students even further to progress to future science study. Those students interested in agriculture should consider the *Agricultural Science* elective.

## Topics studied

<b>Genetics</b>	Students will study the field of genetics. They will learn that the transmission of heritable characteristics from one generation to the next involves DNA and genes.
<b>The origin of species</b>	Students will discover how the theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence.
<b>Organising elements</b>	Students learn how atomic structure and properties of elements are used to organise them in the periodic table. They will also investigate the reactions of metals.
<b>Using chemistry</b>	Students discover how different types of chemical reactions are used to produce a range of products and can occur at different rates.
<b>Objects in motion</b>	Students investigate energy conservation, energy transfers and energy transformations. They also discover how the motion of objects can be described and predicted using the laws of physics.
<b>Global system</b>	Students discover that global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere
<b>The universe</b>	Students learn that universe contains features including galaxies, stars and solar systems. They also investigate the Big Bang theory and how it can be used to explain the origin of the universe

## Study Pathways

