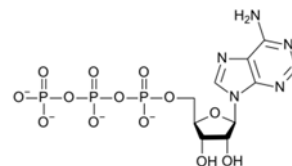




# Year 10 Science Investigations



## Overview

Science Investigations is an elective subject in year 10. It extends students beyond Core Science. Students will learn content and skills that will be very useful when studying any of the senior science subjects, particularly Physics, Chemistry and Biology. It will allow students to study some core science topics in more depth and will therefore help them with their year 10 Core Science studies.

This subject will provide experiences which will enable students to design, perform and write reports on experiments which is a necessary skill for all senior science subjects. It will also emphasize mathematical and graphical techniques used in science.



Students wishing to continue studying science subjects in years 11 and 12 should have performed well in core science in year 9 and should strongly consider studying *Science Investigations* in year 10.

## Topics studied

<b>The Invisible world</b>	In this unit students focus on microbiology, especially yeasts and bacteria. They will discover how we use fermentation and the action of bacteria to make food and beverages. This will culminate in them making cheese.
<b>Introduction to graphing and EELs</b>	Students will learn some techniques of graphing that will enable them to interpret more meaningfully data that they collect from experiments. Students will be exposed to data which show different types of relationships between variables.
<b>Acids base titrations</b>	Students will learn the chemistry of acids and bases. They will do calculations which involve the mole concept, stoichiometry and concentration of solutions. They will also learn the skill of doing an acid-base titration.
<b>Electric circuits</b>	Students will investigate aspects of DC electric circuits. They will learn to construct circuits and take measurements from these circuits. They will also design and perform experiments which will help with their understanding of electricity.

## Study Pathways

