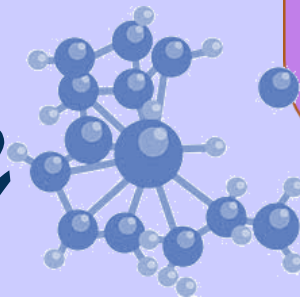




### Overview

Students will build on their knowledge gained in year 7-9 to develop and deepen their understanding of chemistry concepts like moles, making salts, electrolysis, endothermic and exothermic reactions, and the collision theory which governs all chemical reactions in the universe.

# Year 10 Chemistry



### Term 3

Students will continue to deepen their understanding of the reactions in their world by studying the energy changes that occur during a chemical reaction when they investigate endothermic and exothermic experiments. This term they will investigate the importance of these reactions and applying them to our everyday life in the form of batteries and hydrogen fuel. Students will finish the year looking at the collision theory. This allows them to deepen their understanding of how the chemical reactions they have investigated so far can be manipulated to increase productivity. Required practical's investigating temperature changes, and the effect of concentration on the rate of reaction will be looked at.

### Term 1

Students will start by revisiting the concepts covered in year 9 about the structure of the atom which underpins the theory of the whole chemistry course. Students will then develop their skills to apply this knowledge to the structure and bonding of material we use in our everyday life including metallic, ionic, and covalent structures. Students will then go on to look at the quantities of substances needed to ensure reactions are successful and develop their numeracy skills in calculating the amount of substances and concentrations involved in key experiments such as titrations.



### Term 2

Students will continue to build on the knowledge they have gained so far about the atom, periodic table, bonding, and calculations to deepen their understanding about chemical reactions. This term will see students investigate acids and alkalis, metals and their reactions and electrolysis. Key required practical's will be introduced during this term such as making soluble salts, titrations and electrolysis of ionic solutions.