What are we learning about?

In this topic we are going to look at how atoms bond together to form different substances. For example how Hydrogen and Oxygen are bonded to form Water. Once we have an understanding of these types of bonds we will be learning about how this results in substances having different structures and chemical properties.



Why are we learning about it?

Chemical bonds hold everything together. For example all of the atoms that you are made up of! It gives us a greater understanding of why different substances have different properties e.g. why can metals conduct electricity. It also allows us to understand why substances can react differently. It is fundamental to all Biology, Chemistry and Physics.

C2 Structure and Bonding: Learning

Journey

How does this build on the SKILLS I already have? You are already able to draw electronic structure diagrams of atoms from interpreting information from the periodic table. You are going to build on this to draw electronic structure diagrams of compounds.



What new **SKILLS** will I develop? A large part of this topic is theory based. You will be able to draw diagrams to represent the different types of bonding. You will also be able to describe properties of substances and explain using the bonding why they have these certain properties.



What new KNOWLEDGE will I

gain?

You will learn about the 3 types of bonding; Ionic, Covalent and Metallic. You will develop an understanding of what they form between, how we represent them and how the different bonding can lead to substances having different properties.



How does this build on the **KNOWLEDGE** I already have?

In KS3 you will have already learnt about states of matter. This modules builds on that but delves deeper into why substances have certain properties. It builds on the structure of the atom from C1 Atomic structure but this time we will be looking at the bonding between different atoms and the structures of compounds.