

Keywords: Spring 1

Science

Topic Title: SC2 Structure and Bonding

Introduction to the topic: Why are you learning it and how does it link to what you've learned before?

This topic builds on the matter topic from Year 7 and introduces how particles form bonds with each other to make new structures.

What lessons will you cover during the topic?

Metals, ionic and covalent compounds, polymers, allotropes of carbon.

Keyword	Definition
Atom	The smallest part of an element that can exist.
Compound	A substance formed by the chemical union of two or more elements.
Covalent Bond	A bond between atoms formed when atoms share electrons to achieve a full outer shell of electrons.
Giant Covalent Structure	A structure in which very large numbers of atoms are joined together by covalent bonds in a regular network.
Polymer	A large molecule formed from many identical smaller molecules known as monomers.
Properties	The characteristics of something. In chemistry, chemical properties include the reactions a substance can take part in. Physical properties include colour and boiling point.
Molecule	A collection of two or more atoms held together by chemical bonds.
Intermolecular Forces	Weak attractive forces between molecules. When a simple molecular substance melts or boils, it is the intermolecular forces that are broken (not the covalent bonds in each molecule).