

14–16 years

# Structure and bonding

Unscrambling definitions



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# Unscrambled definitions

An **ionic bond** is an electrostatic force of attraction between oppositely charged ions in a regular lattice that forms between a metal and a non-metal.

A **covalent bond** is a type of bond formed by atoms sharing one or more pairs of electrons.

A **metallic bond** is an electrostatic force of attraction between delocalised electrons and the positive ions in a regular lattice.

An **element** is a pure substance made of only one type of atom.

(more on the next slide)

# Unscrambled definitions continued

A **compound** is a pure substance made of two or more different elements whose atoms are joined by chemical bonds; the atoms are in a fixed ratio.

An **atom** is the smallest possible particle of an element; atoms are made up of protons, neutrons and electrons.

A **molecule** is two or more atoms connected by chemical bonds.

**Intermolecular** forces are the relatively weak attractive and repulsive forces between molecules.

# Connection completion: completed sentences

When a metal and a non-metal react, the metal loses one or more electrons and **as a result**, becomes a positively charged ion.

**Conversely**, the non-metal gains one or more electrons to become a negatively charged ion. An ionic bond is formed **since** the oppositely charged ions are held together by electrostatic attraction.