KS4 – Covalent compounds (simple covalent bonding)

Distinguish between:

How a covalent bond is formed. A covalent bond is formed when a pair of electrons is shared between two atoms.

What is a covalent bond? It is the electrostatic attraction between a shared pair of electrons and the nuclei of the atoms.

Covalent bonding results in the formation of molecules.

Hints and tips

Always …

… show the shells touching or overlapping where the covalent bond is formed.

… count the final number of electrons around each atom to make sure that the outer shell is full.

Never …

… include a charge on the atoms.

… draw the electron shells separated.

… draw unpaired electrons in the region of overlap.

The two diagrams below only show the outer-shell electrons.

