

C3 - bonding	
what types of elements form an ionic bond?	Metals and non-metals
What happens to metals in ionic bonding?	They transfer their outer electrons to a non-metal and become a positive ion
What happens to a non-metal in ionic bonding?	They gain electrons from metals and become negatively charged ions
Why do the atoms transfer or gain electrons?	To have a full outer shell
Which elements have full outer shells?	Noble gases in group 0

Ionic compounds	
What are the forces called that hold ionic compounds together?	Electrostatic forces
What is the large cube shaped ionic structure called?	An ionic lattice
Can you name an ionic compound?	Sodium chloride

Covalent bonding	
What types of elements form a covalent bond?	Non-metals and non-metals
What happens in terms of electrons in a covalent bond?	Pairs of electrons are shared by the atoms
What name do we give to a covalent compound?	Molecule
What is a polymer?	A large chain molecule containing covalent bonds
Can you name 2 giant covalent structures?	Diamond and silicon dioxide

Metallic bonding	
What does a metal structure look like in terms of atoms?	The atoms are arranged in layers in a regular pattern
What happens to electrons in metallic bonding?	The electrons on the outer shell of the atoms become delocalised and are free to move through the whole structure
If the electrons are delocalised what name do we now give to the metal atoms?	Ion

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