

# Y12 – Structure and Bonding

Stick this checklist into your yellow book at the beginning of the topic. Tick off the topics as you cover them.		
In this module you are expected to be able to...	In Notes	Revised
<ul style="list-style-type: none"><li>Define:<ul style="list-style-type: none"><li>Ionic Bonding</li><li>Metallic Bonding</li><li>Giant metallic Lattice</li><li>Giant ionic Lattice</li><li>Covalent Bonding</li><li>Giant covalent lattice</li><li>Simple molecular lattice</li><li>Electronegativity</li><li>Dipole</li><li>London Force</li><li>Hydrogen bond</li></ul></li></ul>		
<ul style="list-style-type: none"><li>Draw dot and cross diagrams for<ul style="list-style-type: none"><li>Ionic compounds</li><li>Covalent molecules</li></ul></li></ul>		
<ul style="list-style-type: none"><li>Explain the properties of melting point and conductivity for:<ul style="list-style-type: none"><li>Giant covalent structures</li><li>Giant ionic lattices</li><li>Giant metallic structures</li></ul></li></ul>		
<ul style="list-style-type: none"><li>Explain how three types of intermolecular force compare in strength and origin:<ul style="list-style-type: none"><li>London forces</li><li>Permanent dipole-dipole interactions</li><li>Hydrogen bonds</li></ul></li></ul>		
<ul style="list-style-type: none"><li>Explain the shapes of molecules in terms of electron pair repulsion theory, including names and bond angles.<ul style="list-style-type: none"><li>Octahedral, tetrahedral, pyramidal, non-linear, trigonal planar, linear.</li></ul></li></ul>		
<ul style="list-style-type: none"><li>Explain how hydrogen bonds affect the density of ice.</li></ul>		
<ul style="list-style-type: none"><li>Explain why polar bonds form.</li></ul>		
<ul style="list-style-type: none"><li>Identify whether a molecule is polar or non-polar from its bonds and shape</li></ul>		

## Pre-test Evaluation

I have...	
Updated my yellow book notes	
Ensured I understand all of my notes	
Looked on the open drive for additional work	
Asked my teacher for guidance	
Confidence rating	I’m doomed!    --    -    =    +    ++    I am the BOSS!