

Review C2.2 Structure and Properties

Can you...?	😊	😐	😞
Explain why simple molecules are gases, liquids or solids with low melting and boiling points.			
Understand that the intermolecular forces are overcome when a simple molecular substance melts or boils – NOT the covalent bond!			
Explain why simple molecules do not conduct electricity.			
Explain why ionic compounds have high melting and boiling points.			
Explain how ionic compounds conduct electricity when molten or dissolved in water.			
Explain why giant covalent structures like diamond/graphite have very high melting points.			
Explain why the bonding in diamond allows it to be very hard.			
Explain why the bonding in graphite allows it to be soft and slippery.			
[HT] Explain how delocalised electrons allow graphite to conduct heat and electricity.			
[HT] Explain why the structure of metals allow them to conduct heat and electricity			
Explain why metals can be bent and shaped.			
State what an alloy is and explain why alloys are harder than pure metals (different sizes atoms)			
State what is unique about shape memory alloys that allows them to be used in dental braces			
Describe how properties of polymers depend on what they are made from and the conditions they were made under			
Explain why thermosetting polymers don't melt when heated, but thermosoftening do.			
Describe the sizes of nanoparticles in nm.			
List uses of nanoparticles due to the high surface area to volume ratio.			
[HT] Describe the uses of fullerenes			