



THE TRUTH ABOUT STRUCTURE & BONDING 1

- 1 False The bonds do not break when it changes state – it is a gas due to weak forces between the molecules
- 2 False The bonds do not break when it changes state – ethane has a higher boiling point as there are stronger forces between the molecules
- 3 False The bonds do not break when it changes state – CO₂ has a higher boiling point as there are stronger forces between the molecules
- 4 False There are no molecules – it is a giant covalent lattice
- 5 True
- 6 True
- 7 False The copper ions are all positive so repel! The attraction is between the positive copper ions and the delocalised outer shell electrons
- 8 True but it is only the outer shell electrons that are free to move and there are lots of them from all the atoms (not just one electron!)
- 9 False There are no covalent bonds – the attraction that is overcome is between the positive copper ions and delocalised outer shell electrons
- 10 True
- 11 False It has a lattice of positive and negative ions – there are no molecules!
- 12 False Each ion is attracted to all the nearby ions of opposite charge
- 13 False It has a lattice of positive and negative ions
- 14 False It has a lattice of positive and negative ions – ions of opposite charge are attracted to each other – this attraction is what ionic bonds are!
- 15 False It has a lattice of positive and negative ions – there are no molecules!
- 16 True
- 17 False Ions can be formed by electron transfer – this is NOT an ionic bond. Ionic bonds are the attraction between positive and negative ions
- 18 False Each ion is attracted to all the nearby ions of opposite charge
- 19 True
- 20 True
- 21 True
- 22 False It has made of positive and negative ions – there are no molecules!
- 23 False The ions separate – they actually form new attractions to the water molecules instead of each other
- 24 False It is because ions can move (not electrons)