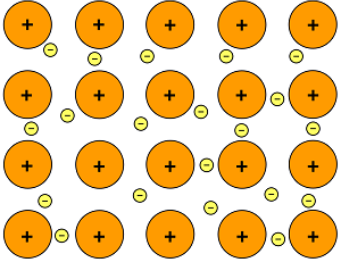


Chemistry Notes

Edexcel IGCSE

Chapter 1h – Metallic Bonding

1h – Metallic Bonding	
1.52C – Know how to represent a metallic lattice by a 2-D diagram	
1.53C – Understand metallic bonding in terms of electrostatic attractions	<ul style="list-style-type: none">• Remember it is a giant structure• Electrostatic forces of attraction between the positive metal ions and the negative 'sea' of delocalized electrons hold the metal together
1.54C – Explain typical physical properties of metals, including electrical conductivity and malleability	<ul style="list-style-type: none">• High melting/boiling point – strong electrostatic attractions take a lot of heat energy to overcome• Conducts electricity – Delocalized electrons can flow through the metal. Thus, when a voltage is applied, there are free-moving charged particles• Malleable – Layers of metal ions can slide past each other without disruption the bonding