CHEMISTRY: CC5-7 Bonding and types of substances

Assessment = ★

Keywords
Bonds, ions, cations, anions, electrostatic forces, ionic bond, ionic compounds, lattice, crystals, polyatomic ions, formulae, anode, cathode, aqueous solution, electrical conductivity, molecule, covalent bond, molecular formula, intermolecular forces, polymers, monomers, allotropes, fullerenes, graphene, graphite, diamond, metallic bond, malleable, delocalised

Assessment & Review ★

Revision lesson
Focus on retrieval, key word definitions and equations.

Bonding models
Models used to describe ionic, covalent and metallic substances – a comparison and evaluation

Properties of metals
Physical properties of metals, metallic structure and bonding

Allotropes of Carbon
Fullerene, graphene, diamond and graphite

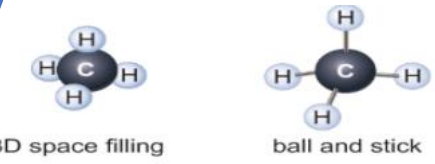
Molecular Compounds
Properties of simple and giant molecular substances.

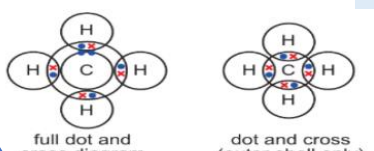
Covalent bonds
Molecules, dot and cross diagrams

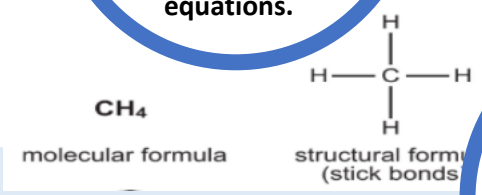
Properties of ionic compounds
Properties of ionic substances related to ionic bond strength and the movement of ions.

Ionic Lattices
Formulae of ionic compounds, -ide and -ate endings.

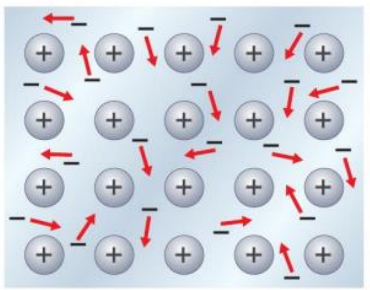
Ionic Bonds (2 lessons)
How ions are formed and calculating the number of subatomic particles in ions and ionic bonding.



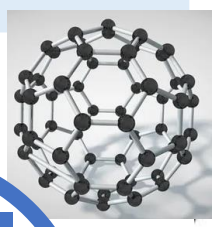


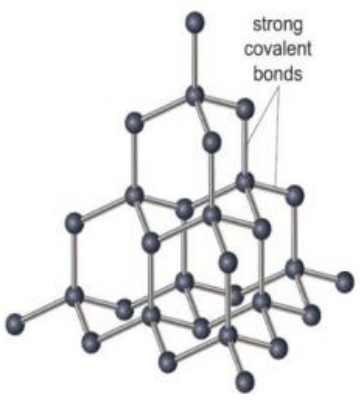


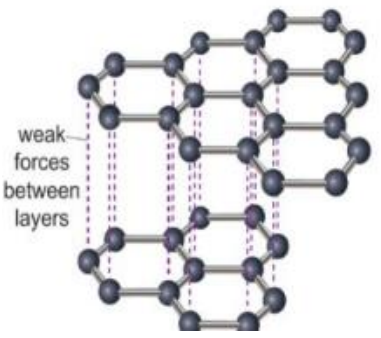
Apply:
CC8 Acids and alkalis
CC10 Electrolytic processes
CC13 Groups in the periodic table

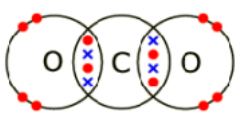


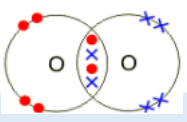
B Metals consist of stacked layers of ions in a 'sea' of delocalised ('free') electrons.

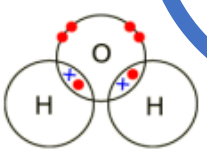


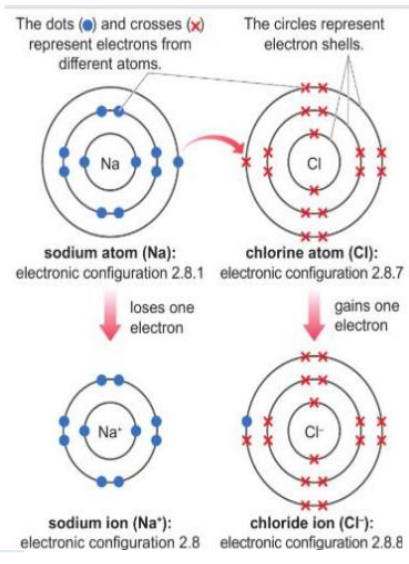


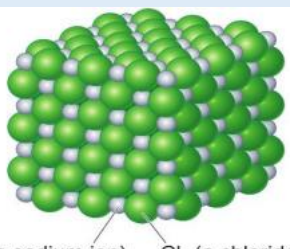












Retrieve:
C1 2 Elements, atoms, compounds
C2 1 The periodic table
CC3 Atomic structure