

CHANGES TO TERMINOLOGY IN THE 2014 CHEMISTRY GUIDE

Topic 1 : Stoichiometric relationships 1.3

Pressure at STP redefined in data booklet: STP conditions = 273 K and 100 kPa; SATP conditions = 298 K and 100 kPa.

Molar volume of an ideal gas at STP = $2.27 \times 10^{-2} \text{ m}^3 \text{ mol}^{-1}$ (= $22.7 \text{ dm}^3 \text{ mol}^{-1}$)

Topic 2 : Atomic structure 2.2

Electron configurations refer to electron sub-shells e.g. $1s^2 2s^2 2p^5$

(Electron arrangements as previously required refer to electron shells only e.g. 2.8.1)

Topic 4 : Bonding

4.3 *Electron domains* now used in place of *negative charge centres*.

Coordinate bond exclusively used in place of *dative bond*

4.4 *London (dispersion) forces* used for instantaneous induced dipole-induced dipole forces of attraction;

Van der Waals' forces redefined as an inclusive term to include dipole-dipole, dipole-induced dipole and London (dispersion) forces

Topic 8 : Acids and bases 8.1

Amphiprotic species can act as Brønsted---Lowry acids and bases; *amphoteric* substances can act as acids and bases, including reactions where protons are not transferred.

Topic 9 : Oxidation and reduction

9.1 *Oxidation state* uses Arabic numerals e.g. +2, -3; *oxidation number* uses Roman numerals in the nomenclature of a compound e.g. Fe(II)O.

9.2 Definition of *electrochemical cell* is now an inclusive term to include voltaic and electrolytic cells.

Topic 10 : Organic chemistry 10.1

Functional group refers to the part of a molecule responsible for specific properties e.g. -OH hydroxyl; *class of compound* refers to the family of compounds/homologous series e.g. alcohols.

Topic 13 : The periodic table - the transition metals 13.1

Transition element redefined to include scandium.

Topic 18 : Acids and bases 18.3

pH curves now used in place of *titration curves*.

Topic 20 : Organic chemistry 20.3

Cis-trans and *E/Z isomerism* used in place of *geometric isomerism*

(Adapted with thanks from a list originally prepared by Catrin Brown of UWC Pearson, Canada)

