

OCR: Chemistry – Unit 2 – Chains, Energy and Resources

Note: For all Mechanisms and Reactions – There is an attached sheet at the end showing all the needed reactions in more detail.

THERE IS ALSO A LIST OF ALL EQUATIONS AND REACTION NEEDED FOR THIS SYLLABUS ATTACHED IN A SEPARATE FILE.

(a) Interpret and use the terms:

(i) Empirical formula as the **simplest whole number ratio of atoms of each element present in a compound.**

(ii) molecular formula as the **actual number of atoms of each element in a molecule,**

(iii) general formula as the simplest algebraic formula of a member of a homologous series:

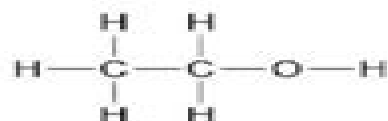
Alkane	C_nH_{2n+2}
Alkene	C_nH_{2n}
Alcohol	$C_nH_{2n+2}OH$
Cycloalkane	C_nH_{2n}
Cycloalkene	C_nH_{2n-2}
Haloalkane	$C_nH_{2n+2}X$

(iv) structural formula as **the minimal detail that shows the arrangement of atoms in a molecule**

E.g., Butane:

$CH_3CH_2CH_2CH_3$ or $CH_3(CH_2)_2CH_3$,

(v) displayed formula as **the relative positioning of atoms and the bonds between them, ie for ethanol:**



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David Baud

A red circular graphic with a gradient, appearing as a semi-circle or a partial circle, located to the right of the name bar.

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