

## Week 5 – Key – Organic Nomenclature, Delivery

2.

- a) CH<sub>4</sub> methane
- b) C<sub>6</sub>H<sub>6</sub> benzene
- c) CH<sub>3</sub>OH methanol
- d) C<sub>3</sub>H<sub>8</sub> propane
- e) CH<sub>3</sub>CH<sub>2</sub>OH ethanol
- f) HCOOH methanoic acid / formic acid
- g) CH<sub>3</sub> – CO – CH<sub>3</sub> propanone / acetone
- h) C<sub>10</sub>H<sub>8</sub> naphthalene

3. Read the text and try to fill in the gaps according to the context

### The story of hydrocarbons

The classes of hydrocarbons are alkanes, **alkenes** alkynes and arenes. Alkanes are hydrocarbons in which all the **bonds** are single bonds and they are characterized by the molecular formula C<sub>n</sub>H<sub>2n+2</sub>.

Functional groups are the structural units responsible for the characteristic reactions of a molecule.

The functional groups in an alkane are its hydrogen substituents.

The simplest alkane is methane, CH<sub>4</sub>; **ethene** is C<sub>2</sub>H<sub>4</sub> and propane is C<sub>3</sub>H<sub>8</sub>.

Constitutional isomers are possible for alkanes with four or more **carbon atoms**.

Thus there are two isomers of molecular **formula** C<sub>4</sub>H<sub>10</sub>. One of these has an unbranched carbon chain and is called butane; the other has a **branched** chain and is called isobutane. Isobutane is a common name.

Cycloalkanes are **compounds / hydrocarbons / alkanes** in which a ring is present; their **formula** is C<sub>n</sub>H<sub>2n</sub>.

8.

	Version 1	Version 2
General appearance	scruffy	smart
Stance and posture	hunched	upright
Hands – position	in pockets	visible and active
Hands – gestures	no helpful gestures	clear, helpful gestures
Eye contact	none	a lot
Facial expression	depressed	concerned, enthusiastic
Movement	static – several nervous gestures	dynamic