

Chapter 14 – Hydrocarbons**Atoms, molecules & compounds**

1) Atoms are the smallest particles which are made up of, &

eg -

2) Molecules are made up of belonging to the same or different

eg -

3) Compounds are made up of

eg -

Hydrocarbons

1) Compounds having are called compounds

2) But theof C, &are not compounds.

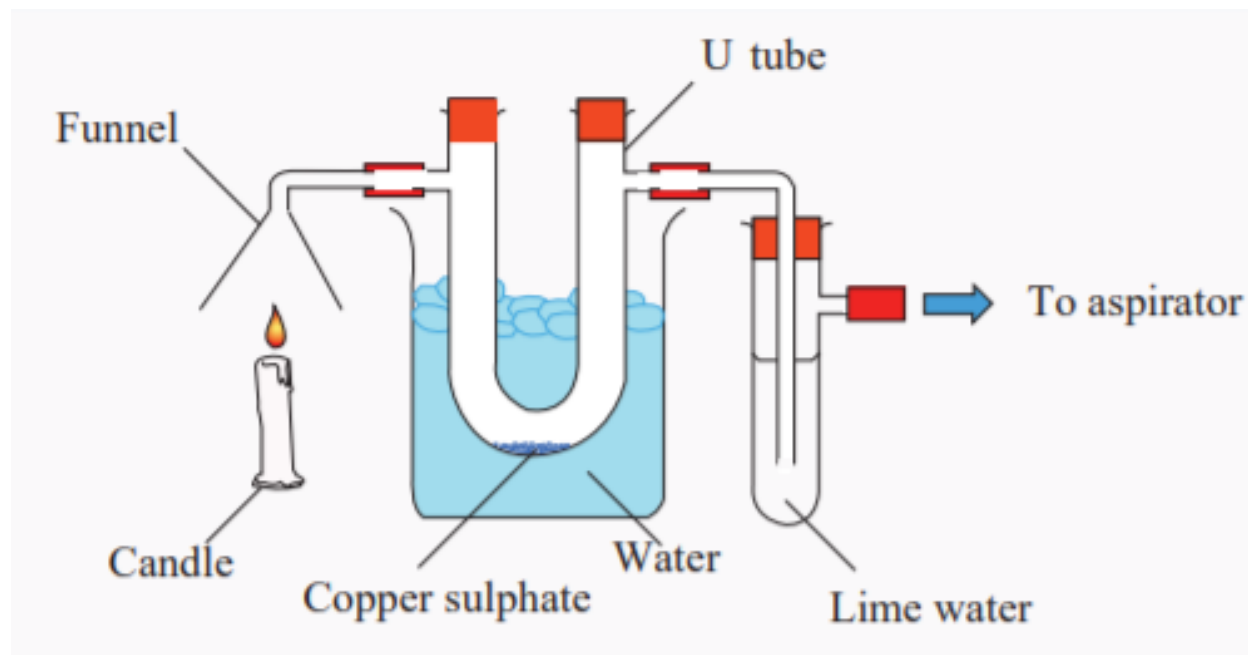
3) compounds will contain C and

(i) (ii) (iii) (iv) (v) (vi)

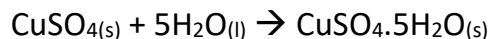
4) The compounds having only & are called

eg -

How to prove that candle wax contains C & H



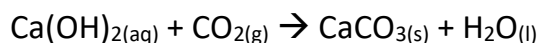
- 1) There should be a between the and the This is to allow (.....) to reach the Since needs
- 2) The colour CuSO_4 will become colour $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ with the presence of
- 3) lime water [.....] will become with the presence of
- 4) U tube was immersed in and to the water which was produced during
- 5) An was used to have a continuous flow through the, and the
- 6) colour CuSO_4 which was inside the became colour $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$. It is due to the presence of
- 7) The balanced equation for the above reaction



- 8) Therefore was produced during of
- 9) Therefore contains and it has reacted with in the atmosphere to produce

10) lime water [.....] became It is due to the presence of

11) The balanced equation for the above reaction



12) Therefore was produced during the of

13) Therefore contains and it has reacted with in the atmosphere to produce

* Petroleum fuel is produce by theof oil.

* Therefore all petroleum fuels contain

Types of hydro carbons

- 1) Hydrocarbons are classified into 3 groups according to the structure of the hydrocarbons.
- 2) The 3 groups of hydrocarbons are
(i) Alkanes (ii) Alkenes (iii) Alkynes
- 3) The common formula of Alkanes is
- 4) Alkanes have only bonds between the atoms.
- 5) The common formula of Alkenes is
- 6) Alkenes contain one or more bonds between the atoms.
- 7) The common formula of alkynes is
- 8) Alkynes contain one or more bonds between the atoms.