

## Modelling Organic Compounds

Name: \_\_\_\_\_

Using the molecular model kit – construct as many “different” molecules as you can using the molecular formula  $C_6H_{14}$  (Using 6 carbons and 14 hydrogens).

*Make sure that each carbon has 4 bonds (all the holes filled up)*

Give the condensed structural formula, the 3-dimensional formula and the correct name for each molecule that you make:

$C_6H_{14}$

Condensed

3-D

Name

1.

2.

3.

4.

5.

Each of these hydrocarbons is an alkane – the general formula for an alkane is  $C_nH_{2n+2}$

Repeat the same procedure using the formula  $C_4H_8$

Condensed

3-D

Name

The general formula for these hydrocarbons is  $C_nH_{2n}$  – this describes two types of hydrocarbons: \_\_\_\_\_ and \_\_\_\_\_.

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Molecules that have the same molecular formula, but a different 3-dimensional structure are called *isomers*.