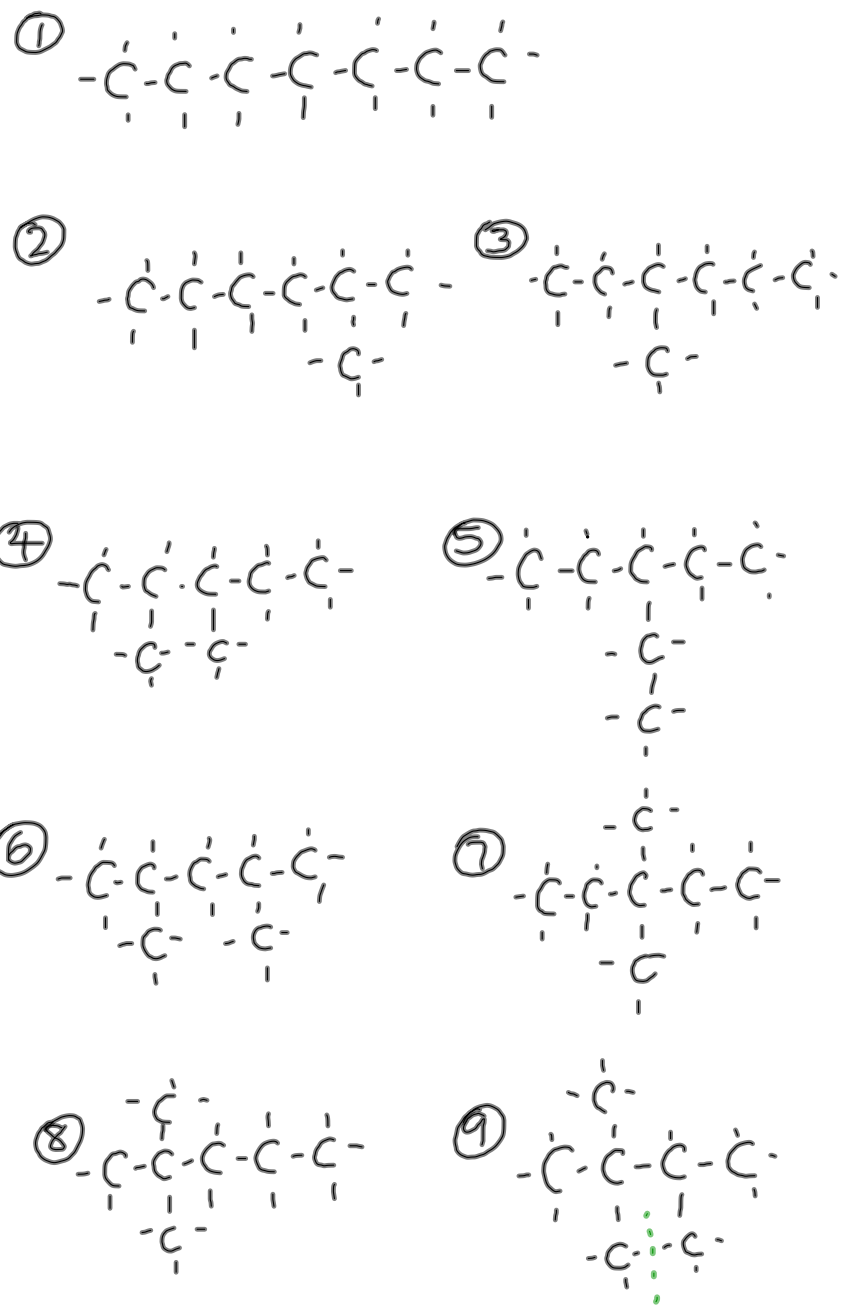


# Isomers of C<sub>7</sub>H<sub>16</sub>



C


## Organic Families

Organic families are classed according to functional groups. Functional groups are areas on a molecule that are reactive.

Hydrocarbons with general formula  $\text{C}_n\text{H}_{2n+2}$  contain all single bonds and are called alkanes.

Ex.

Hydrocarbons with general formula  $\text{C}_n\text{H}_{2n}$  contain one double bond (**alkenes**) or are cyclic (**cycloalkanes**).

 "closed ring"

Hydrocarbons with a general formula  $\text{C}_n\text{H}_{2n-2}$  have a triple bond (**alkynes**) or are cyclic with a double bond (**cycloalkenes**).

Match each of the following descriptions with the correct chemical formula.

**C<sub>30</sub>H<sub>52</sub>** closed ring, two triple bonds

**C<sub>12</sub>H<sub>26</sub>** <sup>C<sub>n</sub>H<sub>2n+2</sub></sup>  
all single bonds (alkane)

**C<sub>10</sub>H<sub>20</sub>** <sup>C<sub>n</sub>H<sub>2n</sub></sup>  
cycloalkane

**C<sub>9</sub>H<sub>14</sub>** <sup>C<sub>n</sub>H<sub>2n-4</sub></sup>  
triple bond and double bond

**C<sub>8</sub>H<sub>14</sub>** <sup>C<sub>n</sub>H<sub>2n-2-2-2</sub></sup>  
two double bonds

