

Organic Chemistry 1 – Hydrocarbons

The key areas of study in this topic are:

- Alkanes
- Alkenes

By the end of this topic I should be able to:

	Start	End
8.1 Recall that hydrocarbons are compounds that contain carbon and hydrogen only		
8.6 Explain an homologous series as a series of compounds which: <ul style="list-style-type: none"> • have the same general formula • differ by CH_2 in molecular formulae from neighbouring compounds • show a gradual variation in physical properties (e.g. boiling points) • have similar chemical properties 		
9.10C Recall the formulae of molecules of the alkanes, methane, ethane, propane and butane, and draw the structures of these molecules, showing all covalent bonds		
9.11C Explain why the alkanes are saturated hydrocarbons		
9.12C Recall the formulae of molecules of the alkenes, ethene, propene, butene, and draw the structures of these molecules, showing all covalent bonds (but-1-ene and but-2-ene only)		
9.13C Explain why the alkenes are unsaturated hydrocarbons, describing that their molecules contain the functional group $\text{C}=\text{C}$		
9.14C Recall the addition reaction of ethene with bromine, showing the structures of reactants and products, and extend this to other alkenes		
9.15C Explain how bromine water is used to distinguish between alkanes and alkenes		
9.16C Describe how the complete combustion of alkanes and alkenes involves the oxidation of the hydrocarbons to produce carbon dioxide and water		

