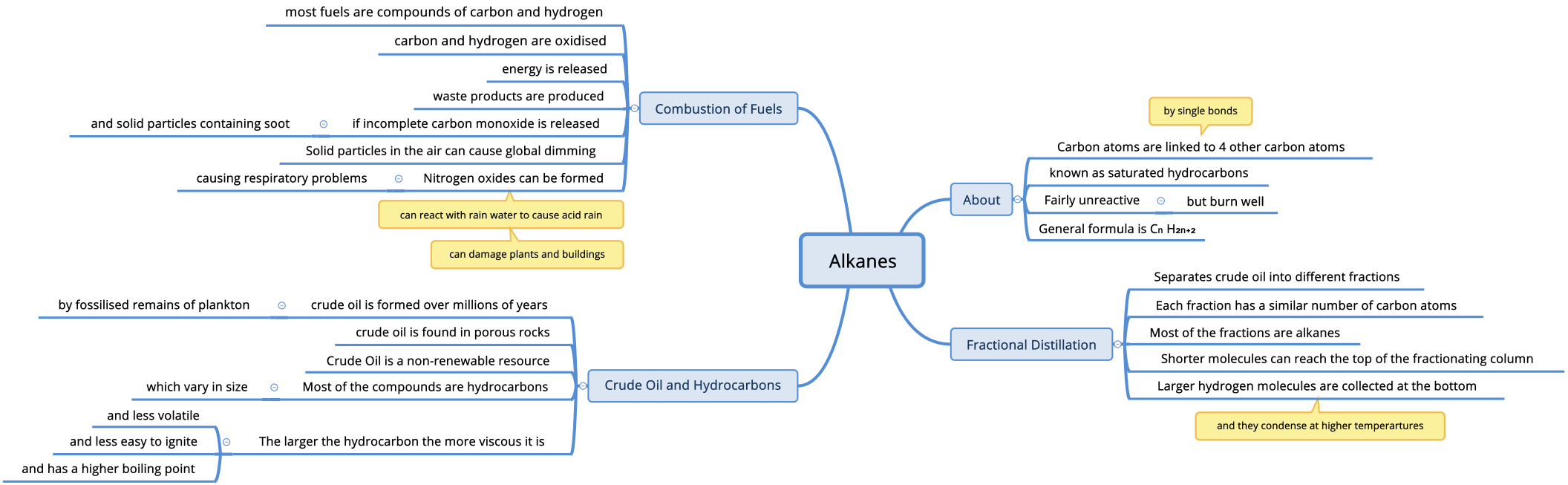
Alkanes
About
Carbon atoms are linked to 4 other carbon atoms
by single bonds
known as saturated hydrocarbons
Fairly unreactive
but burn well
General formula is Cn H2n+2
Fractional Distillation
Separates crude oil into different fractions
Each fraction has a similar number of carbon atoms
Most of the fractions are alkanes
Shorter molecules can reach the top of the fractionating column
Larger hydrogen molecules are collected at the bottom
and they condense at higher temperartures
Crude Oil and Hydrocarbons
by fossilised remains of plankton
crude oil is formed over millions of years
crude oil is found in porous rocks
Crude Oil is a non-renewable resource
Most of the compounds are hydrocarbons
which vary in size
The larger the hydrocarbon the more viscous it is
and less volatile
and less easy to ignite
and has a higher boiling point
Combustion of Fuels
most fuels are compounds of carbon and hydrogen
carbon and hydrogen are oxidised
energy is released
waste products are produced
if incomplete carbon monoxide is released
and solid particles containing soot
Solid particles in the air can cause global dimming
Nitrogen oxides can be formed
causing respiratory problems
can react with rain water to cause acid rain
can damage plants and buildings