C1.4 Crude oil and Fuels

What is a hydrocarbon?
Why are alkanes considered to be saturated?
Name two gases that cause acid rain
Name the first 3 alkanes, give their formulae and draw their structure.

Why is crude oil called a mixture?

What is the general formula for an alkane?
Give 2 examples of biofuels.
What process is used to separate crude oil?

For alkanes, describe how the following properties of a molecule change with increasing size:
- boiling point
- viscosity
- flammability

What type of bonding occurs in alkanes?
What are particulates?
Give the formula for the following molecule

\[
\text{H-C-C-C-C-C-H}
\]

Describe how fractional distillation can be used to separate crude oil.

What are the advantages of using biofuels instead of fossil fuels?

What is the name used to describe the reaction between an element and oxygen to form an oxide?

What is a biofuel?

Write word and symbol equations for the combustion of propane.

Why are carbon dioxide and water produced when an alkane burns?
Give a disadvantage of using biofuels instead of fossil fuels?
Give an environmental consequence of:
Carbon dioxide
Particulates

Why dangerous gas is produced when a fuel burns in a limited supply of oxygen? Why is it dangerous?