

What is crude oil made up of?

List four alkanes.

m_____, e_____, p_____, b_____

Draw the following alkanes:



What is the formula for alkanes?

Describe how crude oil is made.

Keywords: fossil fuel, rock, long time, plankton

What are the uses of crude oil?

Fuel for t_____ e.g. p_____ and d_____.

Used to make other compounds such as p_____, l_____,
s_____, d_____.

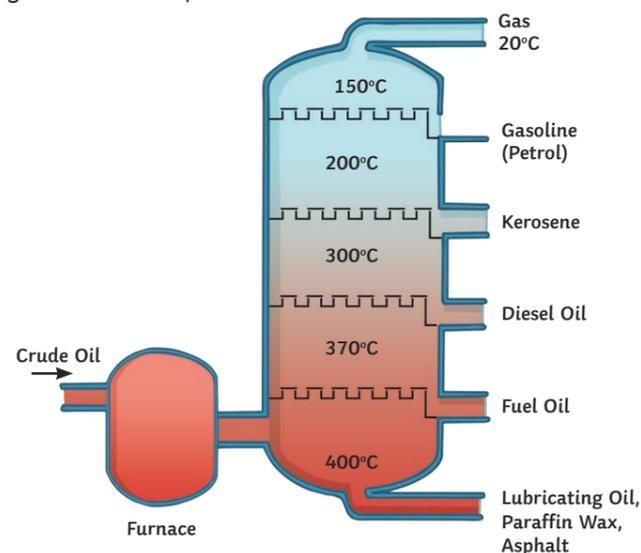
Complete the combustion equation.

hydrocarbon + oxygen →

Complete the balanced symbol equation.



Describe the process of fractional distillation. Use the diagram and keywords to help.



Keywords: mixture, hydrocarbons, evaporated, fractionating column, condense

How does the length of the hydrocarbon affect the boiling point?

The longer the hydrocarbon the **higher/lower** the boiling point.

Delete the wrong answer.

What is bromine water a test for? Choose the correct answer.

- a. alkane
- b. alkene

What colour does it go?

How does the length of the hydrocarbon affect the viscosity? Choose one answer.

- a. more viscous
- b. less viscous
- c. stays the same

Cracking is the breaking down of large chain _____ into shorter chains.

It produces _____ that have a double _____.

Draw a diagram of an alkene.

What is the formula for alkenes?

What are the two methods of cracking? Describe how both methods are done.

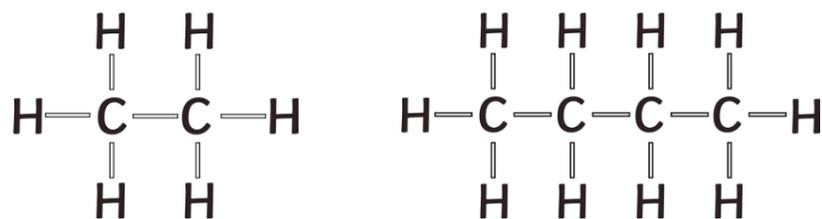
1. S_____

2. C_____

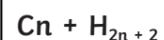
What is crude oil made up of?
Different length hydrocarbons.

List four alkanes.
methane, ethane, propane, butane

Draw the following alkanes:
 C_2H_6 C_4H_{10}



What is the formula for alkanes?



Describe how crude oil is made.

Keywords: fossil fuel, rock, long time, plankton

From the remains of dead plankton and other animals and plants buried in sand and mud over long periods of time.

What are the uses of crude oil?

Fuel for transport e.g. petrol and diesel.

Used to make other compounds such as polymers, lubricants, solvents, detergents.

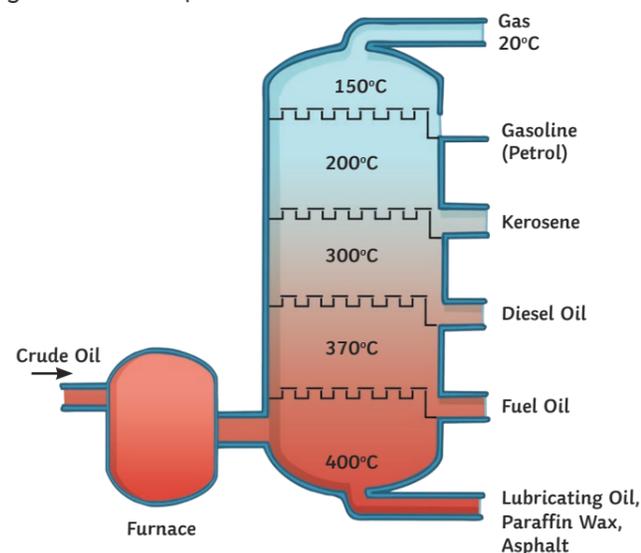
Complete the combustion equation.

hydrocarbon + oxygen → **carbon dioxide + water**

Complete the balanced symbol equation.



Describe the process of fractional distillation. Use the diagram and keywords to help.



Keywords: mixture, hydrocarbons, evaporated, fractionating column, condense

Crude oil is a mixture of hydrocarbons and they are heated until they form a gas.

They all have different boiling points so separate out at different temperatures.

Long chain hydrocarbons have high boiling points, short chain molecules have low boiling points.

How does the length of the hydrocarbon affect the boiling point?

The longer the hydrocarbon the **higher/lower** the boiling point.

Delete the wrong answer.

What is bromine water a test for? Choose the correct answer.

- a. alkane
- b. alkene**

What colour does it go?

colourless

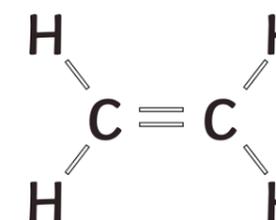
How does the length of the hydrocarbon affect the viscosity?
 Choose one answer.

- a. more viscous**
- b. less viscous
- c. stays the same

Cracking is the breaking down of large chain **hydrocarbons** into shorter chains.

It produces **alkenes** that have a double **bond**.

Draw a diagram of an alkene.



What is the formula for alkenes?



What are the two methods of cracking? Describe how both methods are done.

Steam – heated into a vapour, mixed with steam, heated at very high temperature.

Catalytic – heated into a gas, passed over aluminium oxide catalyst, molecules split.