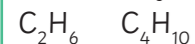


What is crude oil made up of?

List four alkanes.

Draw the following alkanes:

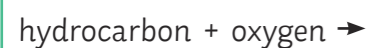


What is the formula for alkanes?

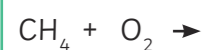
Describe how crude oil is made.

What are the uses of crude oil?

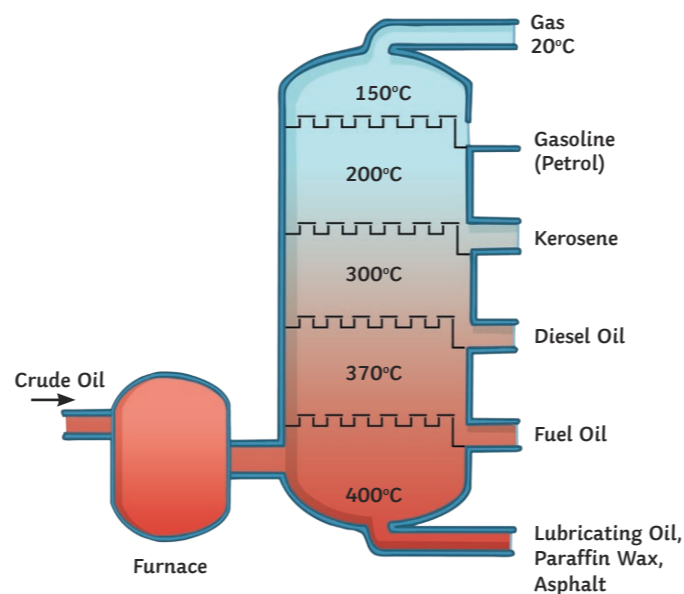
Complete the combustion equation.



Complete the balanced symbol equation.



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



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

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?

Show the cracking of a long chain molecule.

What are the two methods of cracking? Describe the two processes in detail.

1. \_\_\_\_\_
2. \_\_\_\_\_

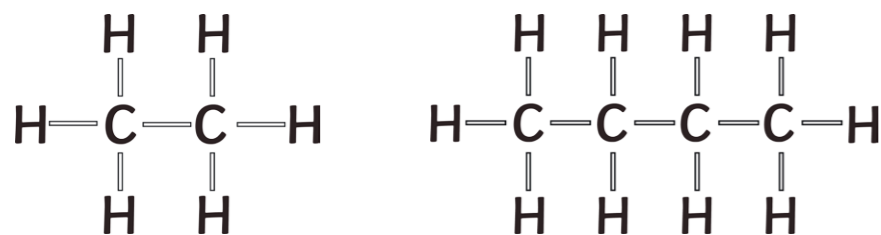
What is crude oil made up of?

**Different length Hydrocarbons.**

List four alkanes.

**methane, ethane, propane, butane**

Draw the following alkanes:



What is the formula for alkanes?



Describe how crude oil is made.

**From the remains of dead plankton and other animals and plants that fall to the bottom of the sea and get covered in mud.**

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.**

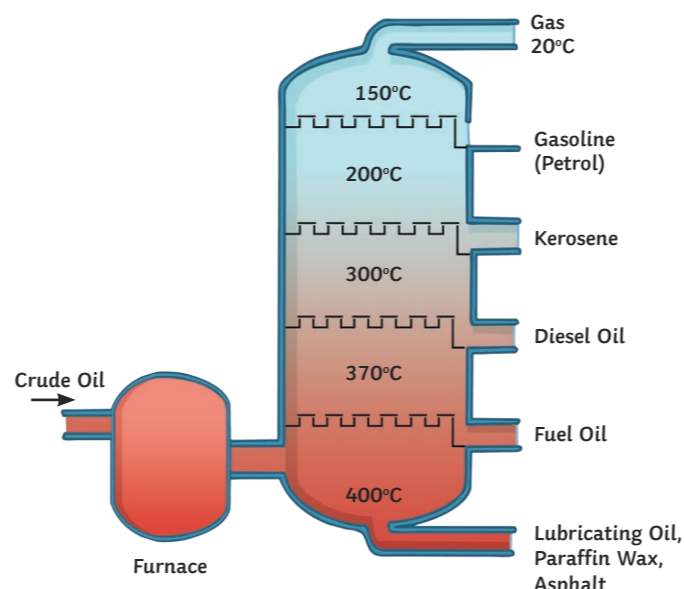
Complete the combustion equation.



Complete the balanced symbol equation.



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



**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 the boiling point - more energy is needed to break up the molecules.**

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

- a. alkane
- b. alkene**

What colour does it go?  
**colourless**

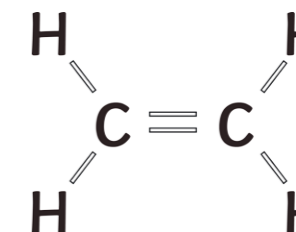
How does the length of the hydrocarbon affect the viscosity? Choose one answer.

- 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**.

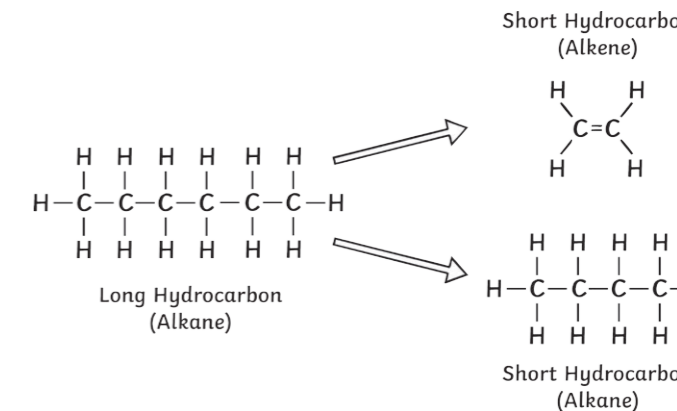
Draw a diagram of an alkene.



What is the formula for alkenes?



Show the cracking of a long chain molecule.



What are the two methods of cracking? Describe the two processes in detail.

**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.**