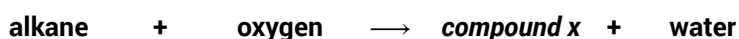


0 1

Some alkanes can be burned and used as fuels. A way to represent the complete combustion of an alkane fuel is shown by the following word equation.



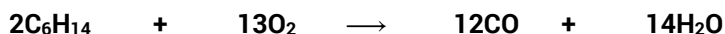
0 1 . 1

Name compound x.

[1 mark]

carbon dioxide

Hexane is an example of an alkane that can be burned as a fuel. One reaction of hexane burning in air is shown below.



0 1 . 2

Name the carbon compound produced in this reaction.

[1 mark]

carbon monoxide

0 1 . 3

Suggest a reason for this carbon compound being produced.

[1 mark]

Burned in low oxygen conditions or only partial or incomplete combustion.

0 2

The table shows the elements that are present in a sample of crude oil. These elements can also be present in the fractions produced from this sample crude oil.

Element	% of each element
Carbon	85
	14
Sulfur	0.5
Nitrogen	0.5

0 2 . 1

Name the missing element.

[1 mark]

hydrogen

0	3
---	---

When fractions from crude oil are burned in air, new compounds are made. These compounds can sometimes cause pollution.

0	3
---	---

 . 

1
---

Describe how burning fractions from crude oil can cause pollution. Use the table to help you.

In your answer you should name the compounds produced.

[5 marks]

Produces <u>carbon dioxide</u>	[1]
.....	
<u>which causes the green house affect or global warming</u>	[1]
.....	
Produces <u>sulfur dioxide</u>	[1]
.....	
<u>which causes acid rain</u>	[1]
.....	
Produces <u>nitrogen oxides or nitrogen dioxide or NO<sub>x</sub></u>	[1]
.....	
.....	
.....	
.....	
.....	
.....	

(Total 9 marks)

End