

0 1

Crude oil contains a large number of hydrocarbons.

0 1 . 1

Crude oil is a finite resource.

What is a finite resource?

[1 mark]Tick (✓) **one** box.

A limited resource

A renewable resource

A sustainable resource

0 1 . 2

What is crude oil formed from?

[1 mark]Tick (✓) **one** box.

Plankton

Volcanoes

Water



0 1 . 3 What type of substance is crude oil?

[1 mark]

Tick (✓) **one** box.

Compound

Element

Mixture

0 1 . 4 The hydrocarbons in crude oil are separated into fractions using fractional distillation.

Complete the sentences.

Choose answers from the box.

[2 marks]

condense

evaporate

freeze

melt

In fractional distillation the crude oil is heated so

the hydrocarbons _____.

The fractions collect as the hydrocarbons cool and _____.

Question 1 continues on the next page

Turn over ►



Hydrocarbons can be cracked to produce more useful molecules.

0 1 . 5 Complete the sentence.

Choose the answer from the box.

[1 mark]

alloys

fertilisers

fuels

Some products of cracking are useful as _____.

0 1 . 6 Hydrogen gas is a product of cracking.

What is used in the test for hydrogen gas?

[1 mark]

Tick (✓) **one** box.

Burning splint

Glowing splint

Limewater



0 1 . 7 5.20 kg of crude oil contains 1.53 kg of LPG (Liquefied Petroleum Gas).

Calculate the percentage (%) of LPG in 5.20 kg of crude oil.

Give your answer to 3 significant figures.

[3 marks]

Percentage (3 significant figures) = _____ %

10

Turn over for the next question

Turn over ►



Question 1

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.1	a limited resource		1	AO1 5.7.1.1 5.10.1.1

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.2	plankton		1	AO1 5.7.1.1

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.3	mixture		1	AO1 5.7.1.1

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.4	evaporate		1	AO1 5.2.2.1 5.7.1.2
	condense		1	

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.5	fuels		1	AO1 5.7.1.4

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.6	burning splint		1	AO1 5.8.2.1

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.7	(percentage =) $\frac{1.53 \times 100}{5.20}$ = 29.42 = 29.4 (%)	allow a correctly calculated answer to 3 significant figures from an incorrect calculation which uses values given in the question	1 1 1	AO2 5.7.1.2

Total Question 1	10
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