

0 1

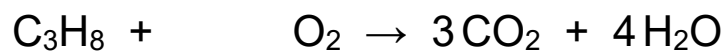
This question is about the Earth's resources.

When most fuels burn carbon dioxide is produced.

Propane (C₃H₈) is a fuel.

0 1 . 1

Balance the equation for the combustion of propane.

[1 mark]

0 1 . 2

Describe the test for carbon dioxide.

Give the result of the test.

[2 marks]

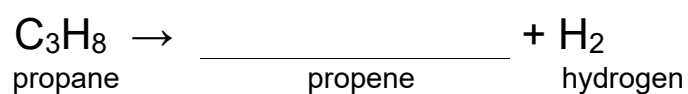
Test _____

Result _____

0 1 . 3

Propane can be cracked to produce propene and hydrogen.

Complete the symbol equation for the reaction.

[1 mark]

0 1 . 4 Describe the test for hydrogen.

Give the result of the test.

[2 marks]

Test _____

Result _____

0 1 . 5 Propene is an alkene.

Describe the test for alkenes.

Give the colour change in the test.

[3 marks]

Test _____

Colour change _____ to _____

9

Turn over for the next question

Turn over ►



Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.1	$C_3H_8 + 5 O_2 \rightarrow 3 CO_2 + 4 H_2O$	allow multiples	1	AO2 5.1.1.1 5.7.1.3
01.2	(bubble gas through) lime water turns milky / cloudy / white or white precipitate forms	MP2 is dependent upon correct response in MP1 allow (bubble gas through) calcium hydroxide (solution)	1 1	AO1.2 5.8.2.3
01.3	C_3H_6		1	AO2 5.1.1.1 5.7.1.4
01.4	burning / lit splint burns with a (squeaky) pop sound	MP2 is dependent upon correct response in MP1 allow flame do not accept glowing splint allow pops	1 1	AO1 5.8.2.1
01.5	bromine (water) (colour change) orange (to) colourless	do not accept bromide } allow 1 mark for colourless (to) orange ignore clear	1 1 1	AO1 5.7.1.4
Total			9	