

GCSE Science/Chemistry

Mark Scheme

GCSE Science/Chemistry
Internally Assessed Activity Unit C1b
Topic 7 - There's One Earth

Fuels

edexcel 

1	a		Thermometer; Water; Burner;	3	
	b	i	1.47 (g);	1	
		ii	To check (that the results were reliable);	1	
		iii	Smallest mass of fuel used;	1	
		iv	Availability/cost/pollution/waste products/storage/ toxicity;	1	
		v	Carbon; Incomplete;	2	
					Total 9 marks

2	a		Correct plotting;; (1 error = 1 mark) Suitable straight line or curve of best fit;	2 1	
	b		Their value read from graph (allow error of 1 small square);	1	
					Total 4 marks

3	a		(Petrol and diesel) are made from crude oil; Limited supplies of crude oil/crude oil non-renewable;	1 1	
	b		Bio-fuels made from plants; Renewable because more plants can be grown;	1 1	
	c		Does not produce carbon dioxide/only waste product water/ water can be used to make more hydrogen;	1	
	d		$C_2H_5OH + 3O_2 \rightarrow 2CO_2 + 3H_2O$ Reactants; products; balanced; (only award if first two marks are given);	3	
	e		need to sell cars; / used to promote or advertise their cars only features positive aspects of hydrogen (or for petrol - reverse argument)	1 1	
					Total 10 marks

4			Appropriate comment on fair testing Appropriate comment on accuracy Appropriate comment on validity Appropriate comment on reliability	1 1 1 1	
					Total 4 marks

					Overall total 27 marks
--	--	--	--	--	-----------------------------------