

GCSE Science/Chemistry

Mark Scheme

GCSE Science/Chemistry
Internally Assessed Activity Unit C1a
Topic 5 - Patterns in Properties

The Periodic Table

1	a	i	Sulphur; carbon;	2	
		ii	Fe; 5;	2	
	b	i	Two from: hydrogen/carbon/oxygen/carbon/ phosphorus/sulphur/iron/zinc/copper/lead/silver/	2	
		ii	gold/mercury;; It contains three elements chemically combined;	1	
	c		111;	1	
	d	i	Halogens;	1	
		ii	Bromine- red-brown liquid; Chlorine- green gas; Iodine- shiny grey solid;	1 1 1	
					Total 12 marks

2	a	i	All non-metals; All reactive;	1 1	
		ii	D/H and A/E/G; reason - D/H very reactive metals giving alkaline solution / high melting point / solids; reason - A/E/G unreactive non-metals / low melting points / gases at room temp;	1 1 1	
	b	i	Description of a test for solubility in acid /alkali Description of a test for density - eg. record mass in grams, divide by volume in cm ³ ;	1 1	
		ii	General statement about good agreement/one comparison of prediction with actual properties; Comparison of prediction with actual properties; Comparison of prediction with actual properties;	3	
					Total 10 marks

3	a		Scales well chosen and labelled; Correct plotting; (1 error = 1 mark) Best fit line drawn;	1 2 1	
	b		Look up atomic number of rubidium, find on x axis, go up to graph line, read off m pt. on y axis; (award mark for correct drawing on graph)	1	
					Total 5 marks

					Overall total 27 marks
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