

GCSE Chemistry A (Gateway Science) J248/03 C1-C3 and C7 Higher (Higher Tier)

Question Set 11

1 Magnesium is an element. It is solid at room temperature.

(a)	(i)	Solid magnesium cannot be compressed.	
		Why?	[1]
	(ii)	Solid magnesium cannot flow, but liquid magnesium can flow.	
		Explain why.	[3]
	(iii)	Magnesium gas completely fills any container it is put in.	
		Explain why.	[2]
(b)		Magnesium reacts with water. Magnesium hydroxide, $Mg(OH)_2$, and hydrogen, H_2 , are made.	
		Write a balanced symbol equation for this reaction.	[2]
(c)		Magnesium nitrate has the formula $Mg(NO_3)_2$.	
(-)		Calculate the relative formula mass of magnesium nitrate.	
		Answer =	[1]

Total Marks for Question Set 11:9

	(0)	18 2 He ^{hellum} 4.0	10 Ne	^{пеол} 20.2	18	Ar	argon 39.9	36	Kr	krypton 83.8	54	Хе	xenon 131.3	86	Rn	radon			
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	(9)	16	8 O	oxygen 16.0	16	S	32.1	34	Se	selenium 79.0	52	Te	tellurium 127.6	84	Ъо	polonium	116	Ľ	livermorium
(2) Key atomic number Symbol Sy	(5)	15	7 N	nitrogen 14.0	15	٩.	31.0	33	As	arsenic 74.9	51	Sb	antimony 121.8	83	Bi	bismuth 209.0			
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	(1)	Hydrogen 1.0	с Гі	lithium 6.9	11	Na	23.0	19	¥	potassium 39.1	37	Rb	Rubidium 85.5	55	ပိ	caesium 132.9	87	ŗ	francium

The Periodic Table of the Elements



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