

Question 1

1(a)	electrons: 62 (1) neutrons: 92 (1)	2
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Question 2

2(a)	2,8,2	1
2(e)	4 / four	1

Question 3

3(c)	electronic configuration 2,8 with no other shells added (1) + / 1+ outside brackets (1)	2
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Question 4

4(c)	protons: 53 (1) neutrons: 74 (1)	2
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Question 5

5(b)	He	1
5(c)	I	1

Question 6

6(c)	configuration as 2,8,7	1
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Question 7

7(b)	2 electrons in shell of Li only (1) + / 1+ charge outside brackets (1)	2
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7(c)	protons: 35 (1) electrons: 44 (1)	2
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Question 8

8(a)	electrons: 17 (1) neutrons: 20 (1) protons: 17 (1)	3
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Question 9

9(e)(iv)	2,4	1
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Question 10

10(b)	2 electrons in outer shell (1) 2,8,8 in inner shells (1)	2
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Question 11

11(f)(i)	2,8	1
11(f)(ii)	M1 26 (protons) M2 23 (electrons)	2

Question 12

12(a)(ii)	B	1
12(a)(iii)	F	1

Question 13

13(c)	xenon	1
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Question 14

14(a)	M1 5p and 5e (1) M2 6n (1)	2
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Question 15

15(a)(i)	charge	relative mass	2
	-1		
	0	1	
		1	
	(1)	(1)	
Mark by column			

15(b)	Na ⁺ or Al ³⁺ (1) F ⁻ or O ²⁻ or N ³⁻ (1) Ne (1)	3
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