Questions
Q1.
Some questions must be answered with a cross in a box (\boxtimes). If you change your mind about an answer, put a line through the box (\boxtimes) and then mark your new answer with a cross (\boxtimes).
This question is about gases.
Some damp litmus paper is placed in a gas. The litmus paper is bleached. Which gas bleaches damp litmus paper?
(1)
A carbon dioxide B chlorine C hydrogen D oxygen
(Total for question = 1 mark)
Q2.
Some questions must be answered with a cross in a box (\boxtimes). If you change your mind about an answer, put a line through the box (\boxtimes) and then mark your new answer with a cross (\boxtimes).
This question is about elements in group 7, the halogens.
Which halogen is a green gas at room temperature and pressure?
A bromine B chlorine C fluorine D iodine
(Total for question = 1 mark)

Q3.
Some questions must be answered with a cross in a box (\boxtimes). If you change your mind about an answer, put a line through the box (\boxtimes) and then mark your new answer with a cross (\boxtimes).
This question is about gases.
When sodium is added to water, hydrogen gas is produced.
Which observation shows that a gas has been produced?
A a white precipitate forms B effervescence is seen C the sodium sinks in the water D the water changes to a pink colour
(Total for question = 1 mark)
Q4.
Lithium, sodium and potassium are reactive metals in group 1 of the periodic table.
In an experiment equal-sized pieces of lithium, sodium and potassium are added to separate samples of water. A flame is produced only with potassium because potassium
 □ A is the softest metal □ B has the lowest melting point □ C is the most reactive □ D is the only flammable metal
(Total for question = 1 mark)

Q5.

Which of the following rows gives the colours of the group 7 elements chlorine and bromine at room temperature?

(1)

	chlorine	bromine
□ A	red-brown	purple
В	yellow-green	grey
□ C	yellow-green	red-brown
D	grey	red-brown

(Total for question = 1 mark)

Q6.

Answer the question with a cross in the box you think is correct \square . If you change your mind about an answer, put a line through the box \square and then mark your new answer with a cross \square .

This question is about some of the elements in group 7 of the periodic table.

Which row in the table correctly shows the colours and physical states of the elements at room temperature?

(1)

□ A	A iodine: purple gas bromine: yellow liquid	
☐ B chlorine: pale green gas iodine: brown soli		iodine: brown solid
☑ C	bromine: red-brown liquid	chlorine: yellow liquid
□ D	iodine: dark grey solid	bromine: red-brown liquid

(Total for question = 1 mark)

Q7.

Figure 2 shows the melting and boiling points of bromine and iodine.

element	melting point in °C	boiling point in °C	
bromine	-7	59	
iodine	114	184	

Figure 2

Using the information in Figure 2, which row shows the physical states of these elements at 50 °C?

(1)

		bromine	iodine
Š	A	liquid	gas
	В	solid	liquid
×	C	gas	solid
N	D	liquid	solid

(Total for question = 1 mark)

Q8.

Answer the question with a cross in the box you think is correct \boxtimes . If you change your mind about an answer, put a line through the box \boxtimes and then mark your new answer with a cross \boxtimes .

What are the elements in group 1 of the periodic table called?

(1)

	Α	alkalı metals
	В	fullerenes
1	C	halogens

D noble gases

(Total for question = 1 mark)

Q9.

Answer the question with a cross in the box you think is correct \boxtimes . If you change your mind about an answer, put a line through the box \boxtimes and then mark your new answer with a cross \boxtimes .

This question is about potassium and zinc.

Which of the following temperatures is most likely to be the melting point of potassium?

☐ A -63 °C
☐ B 6.3 °C
☐ C 63 °C
☐ D 630 °C

(Total for question = 1 mark)

Mark Scheme

Q1.

Question number	Answer	Mark
	B chlorine is the only correct answer.	(1) AO1 1
	A, C and D are incorrect because only chlorine bleaches litmus	

Q2.

Question number	Answer	Mark
	B chlorine is the only correct answer	(1) A01 1
	A, C and D are incorrect because only chlorine is green	VX.525005555555

Q3.

Question number	Answer	Mark
	B effervescence is seen is the only correct answer.	(1) AO1 2
	A, C and D are incorrect as they are not linked to gas production	

Q4.

Answer	Mark
C is the most reactive	(1) AO 2 1
The only correct answer is C	75233070000-1
A is not correct because this is irrelevant	
B is not correct because this is irrelevant	
D is not correct because this is irrelevant	
	C is the most reactive The only correct answer is C A is not correct because this is irrelevant B is not correct because this is irrelevant

Q5.

Question number		
	C yellow-green red-brown is the only correct answer A gives the colours for iodine vapour and chlorine gas B gives the colours for solid iodine and iodine vapour D gives the colours for bromine liquid and iodine vapour	(1)

Q6.

Question number	Answer				
	D iodine: dark-grey solid Is the only correct answer	bromine: red-brown liquid	(1)		
	and an extension of the second	st one incorrect piece of information	A01		

Q7.

Question number	Answer			Mark	
	D	liquid	solid	is the only correct answer	(1)
	A, B and C are incorrect because bromine is a liquid and iodine is a solid at 50 °C				

Q8.

Question number	Answer				
	A alkali metals				
	A is the only correct answer.				
	B is incorrect because fullerenes are not a group in the periodic table				
	C is incorrect because halogens are group 7				
	D is incorrect because noble gases are group 0				

Q9.

Question number	Answer	Mark (1)
	C 63 °C Is the only answer. A would be a gas at room temperature	
	B would be a liquid at room temperature D alkali metals have low melting points – this is too high	A01