PEARSON EDEXCEL GCSE COMBINED SCIENCE (HIGHER) · 1SC0

CHEMISTRY



EXAM QUESTION PACK

TOPIC 1: KEY CONCEPTS IN CHEMISTRY: THE PERIODIC TABLE (PAPER 2)

SCORE	PERCENTAGE
/83	%

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Q1.

An atom of phosphorus contains 15 electrons.

Describe how these 15 electrons are arranged in a phosphorus atom.

(2)

.....

.....

.....

.....

(**Q20 1SC0/1CF, June 2013**)

Q2.

An atom of phosphorus contains 15 electrons.

Describe how these 15 electrons are arranged in a phosphorus atom.

(2)

.....

.....

.....

.....

(**Q16 1SC0/2CF, June 2013**)

Q3.

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

Magnesium is a metal.

(i) State **one** physical property of magnesium.

(1)

.....

(ii) Which element is in the same group of the periodic table as magnesium? Use the periodic table to help you answer this question.

(1)

☒ **A** carbon

☒ **B** chromium

☒ **C** sodium

☒ **D** strontium

(Total for question = 2 marks)

(**Q04a 1SC0/1CF, June 2023**)

Q4.

(i) Magnesium atoms have 12 electrons.

Complete the electronic configuration of a magnesium atom.

(1)

2.8. .....

(ii) The electronic configuration of a chlorine atom is 2.8.7

Explain how the electronic configuration of chlorine is linked to its period in the periodic table.

(2)

.....

.....

.....

.....

(Total for question = 3 marks)

(**Q04b 1SC0/1CF, June 2023**)

Q5.

Atoms of neon are made up of subatomic particles.

(i) Figure 9 shows some information about the subatomic particles in neon atoms.

Complete Figure 9 with the missing information.

(3)

subatomic particle	relative charge	relative mass
proton	.....	1
neutron	0	.....
electron	.....	negligible

Figure 9

(ii) All atoms of neon have an atomic number of 10.

Describe what information about the number of subatomic particles can be obtained from the atomic number of neon.

(2)

.....

.....

.....

.....

(iii) Explain why atoms of neon are electrically neutral.

(2)

.....

.....

.....

.....

(Total for question = 7 marks)

(**QU05a 1SC0/1CF, June 2025**)

Q6.

Atoms of neon are made up of subatomic particles.

(i) Figure 1 shows some information about the subatomic particles in neon atoms.

Complete Figure 1 with the missing information.

(3)

subatomic particle	relative charge	relative mass
proton	.....	1
neutron	0	.....
electron	.....	negligible

Figure 1

(ii) All atoms of neon have an atomic number of 10.

Describe what information about the number of subatomic particles can be obtained from the atomic number of neon.

(2)

.....

.....

.....

.....

(iii) Explain why atoms of neon are electrically neutral.

(2)

.....

.....

.....

.....

(Total for question = 7 marks)

(**QU01a 1SC0/1CH, June 2025**)

Q7.

This question is about the metals and non-metals in period 3 of the periodic table.

Figure 1 shows some data about some of the elements in period 3.

symbol	atomic number	melting point in °C
Na	11	98
Mg	12	650
Al	13	660
Si	14	1410
P	15	44
Cl	17	–101
Ar	18	–189

Figure 1

Use the periodic table to answer these questions.

(i) Give the **name** of the element in period 3 that is not shown in Figure 1.

(1)

.....

(ii) Give the relative atomic mass of silicon.

(1)

.....

(iii) State which metal and which non-metal in Figure 1 have the lowest melting points.

(2)

metal with lowest melting point

.....

non-metal with lowest melting point

.....

(Total for question = 4 marks)

(**QU01a 1SC0/2CF, June 2024**)

Q8.

Argon is in group 0 of the periodic table.

Identify, using the periodic table on the back cover of this paper, which of these elements is in the same period as argon.

(1)

☒ **A** bromine

☒ **B** iron

☒ **C** magnesium

☒ **D** xenon

(Total for question = 1 mark)

(**Q02 1SC0/1CF, June 2018**)

Q9.

Each element has an atomic number.

(i) State what is meant by **atomic number.**

(1)

.....

.....

(ii) The atomic number of boron is 5.
Boron exists as two isotopes boron-10 and boron-11.

Use this information to explain why boron-10 and boron-11 are isotopes.

(2)

.....

.....

.....

.....

(**Q24 1SC0/1CH, June 2013**)

Q10.

Each element has an atomic number.

(i) State what is meant by **atomic number.**

(1)

.....

.....

(ii) The atomic number of boron is 5.
Boron exists as two isotopes boron-10 and boron-11.

Use this information to explain why boron-10 and boron-11 are isotopes.

(2)

.....

.....

.....

.....

(**Q15 1SC0/2CH, June 2013**)

Q11.

(a) Complete the sentence by putting a cross (☒) in the box next to your answer.

The particles in atoms are electrons, neutrons and protons.

The mass of an electron is

(1)

☒ **A** greater than the mass of a neutron

☒ **B** the same as the mass of a proton

☒ **C** smaller than the mass of a proton

☒ **D** the same as the mass of a neutron

(b) The atomic number of oxygen is 8.

The mass number of an atom of oxygen is 17.

Describe the number and type of particles in the nucleus of this atom.

(2)

.....

.....

.....

.....

(c) Sulfur and oxygen are both in group 6 of the periodic table.

Explain, in terms of their electronic configurations, why they are both in group 6.

(2)

.....

.....

.....

.....

(d) An atom of phosphorus contains 15 electrons.

Describe how these 15 electrons are arranged in a phosphorus atom.

(2)

.....

.....

.....

.....

(e) Phosphorus oxide is a compound that contains covalent bonds.

(i) Describe what is meant by a **covalent bond.**

(2)

.....

.....

.....

.....

(ii) The formula of a molecule of phosphorus oxide is P_4O_{10}

Give the empirical formula of this oxide.

(1)

.....

(Total for Question = 10 marks)

(**Q46 1SC0/1CH, June 2013**)

Q12.

(a) The table shows the number of electrons, neutrons and protons in particles P, Q, R, S, T and V.

particle	number of		
	electrons	neutrons	protons
P	1	0	1
Q	3	4	3
R	8	8	8
S	13	14	13
T	18	16	16
V	18	20	20

(i) Which particle is a negatively charged ion?

Put a cross (☒) in the box next to your answer.

(1)

☒ **A** P

☒ **B** S

☒ **C** T

☒ **D** V

(ii) Which particles are atoms of metals?

Put a cross (☒) in the box next to your answer.

(1)

☒ **A** P and R

☒ **B** Q and R

☒ **C** Q and S

☒ **D** Q, S and V

(b) Each element has an atomic number.

(i) State what is meant by **atomic number.**

(1)

.....

.....

(ii) The atomic number of boron is 5.
Boron exists as two isotopes boron-10 and boron-11.

Use this information to explain why boron-10 and boron-11 are isotopes.

(2)

.....

.....

.....

.....

(c) (i) Explain what is meant by the term relative atomic mass.

(2)

.....

.....

.....

.....

(ii) A sample of boron contains
19.7% of boron-10.
80.3% of boron-11.

Use this information to calculate the relative atomic mass of boron.

(3)

.....

.....

.....

.....

.....

.....

(Total for Question = 10 marks)

(**Q14 1SC0/1CH, June 2013**)

Q13.

(a) Complete the sentence by putting a cross (☒) in the box next to your answer.

The particles in atoms are electrons, neutrons and protons.

The mass of an electron is

(1)

☒ **A** greater than the mass of a neutron

☒ **B** the same as the mass of a proton

☒ **C** smaller than the mass of a proton

☒ **D** the same as the mass of a neutron

(b) The atomic number of oxygen is 8.

The mass number of an atom of oxygen is 17.

Describe the number and type of particles in the nucleus of this atom.

(2)

.....

.....

.....

.....

(c) Sulfur and oxygen are both in group 6 of the periodic table.

Explain, in terms of their electronic configurations, why they are both in group 6.

(2)

.....

.....

.....

.....

(d) An atom of phosphorus contains 15 electrons.

Describe how these 15 electrons are arranged in a phosphorus atom.

(2)

.....

.....

.....

.....

(e) Phosphorus oxide is a compound that contains covalent bonds.

(i) Describe what is meant by a **covalent bond.**

(2)

.....

.....

.....

.....

(ii) The formula of a molecule of phosphorus oxide is P_4O_{10}

Give the empirical formula of this oxide.

(1)

.....

(Total for Question = 10 marks)

(**Q43 1SC0/2CH, June 2013**)

Q14.

(a) The table shows the number of electrons, neutrons and protons in particles P, Q, R, S, T and V.

particle	number of		
	electrons	neutrons	protons
P	1	0	1
Q	3	4	3
R	8	8	8
S	13	14	13
T	18	16	16
V	18	20	20

(i) Which particle is a negatively charged ion?

Put a cross (☒) in the box next to your answer.

(1)

☒ **A** P

☒ **B** S

☒ **C** T

☒ **D** V

(ii) Which particles are atoms of metals?

Put a cross (☒) in the box next to your answer.

(1)

☒ **A** P and R

☒ **B** Q and R

☒ **C** Q and S

☒ **D** Q, S and V

(b) Each element has an atomic number.

(i) State what is meant by **atomic number.**

(1)

.....

.....

(ii) The atomic number of boron is 5.
Boron exists as two isotopes boron-10 and boron-11.

Use this information to explain why boron-10 and boron-11 are isotopes.

(2)

.....

.....

.....

.....

(c) (i) Explain what is meant by the term relative atomic mass.

(2)

.....

.....

.....

.....

(ii) A sample of boron contains
19.7% of boron-10.
80.3% of boron-11.

Use this information to calculate the relative atomic mass of boron.

(3)

.....

.....

.....

.....

.....

.....

(Total for Question = 10 marks)

(**Q04 1SC0/2CH, June 2013**)

Q15.

(a) Complete the table to show the relative mass of a neutron and of an electron.

(2)

particle	relative mass
proton	1
neutron	
electron	

(b) Complete the sentence by putting a cross (☒) in the box next to your answer.

An atom has no overall charge because it contains

(1)

☒ **A** more protons than electrons

☒ **B** the same number of electrons and protons

☒ **C** the same number of electrons and neutrons

☒ **D** more neutrons than electrons

(c) The atomic number of lithium is 3.
The mass number of an atom of lithium is 7.

State the name and number of each of the particles in the nucleus of this atom.

(2)

.....

.....

.....

(**Q22 1SC0/1CF, June 2015**)

Q16.

(a) Complete the table to show the relative mass of a neutron and of an electron.

(2)

particle	relative mass
proton	1
neutron	
electron	

(b) Complete the sentence by putting a cross (☒) in the box next to your answer.

An atom has no overall charge because it contains

(1)

☒ **A** more protons than electrons

☒ **B** the same number of electrons and protons

☒ **C** the same number of electrons and neutrons

☒ **D** more neutrons than electrons

(c) The atomic number of lithium is 3.
The mass number of an atom of lithium is 7.

State the name and number of each of the particles in the nucleus of this atom.

(2)

.....

.....

.....

(**Q10 1SC0/2CF, June 2015**)

Q17.

The atomic number of oxygen is 8.

The mass number of an atom of oxygen is 17.

Describe the number and type of particles in the nucleus of this atom.

(2)

.....

.....

.....

.....

(**Q18 1SC0/1CF, June 2013**)

Q18.

The atomic number of oxygen is 8.

The mass number of an atom of oxygen is 17.

Describe the number and type of particles in the nucleus of this atom.

(2)

.....

.....

.....

.....

(**Q14 1SC0/2CF, June 2013**)

Q19.

Potassium reacts with oxygen to form potassium oxide.

(i) Describe the test to show that a gas is oxygen.

(2)

.....

.....

.....

.....

(ii) Potassium oxide is ionic.

Write the electronic configurations for the ions in potassium oxide, K_2O.

(2)

potassium ion: .....

oxide ion: .....

(Total for question = 4 marks)

(**Q03c 1SC0/2CH, Nov 2021**)

Q20.

Describe **two** differences between Mendeleev's periodic table and the modern periodic table.

(2)

1.....

.....

2.....

.....

(Total for question = 2 marks)

(**Q03d 1SC0/1CF, June 2024**)

Q21.

Elements and atoms

Beryllium, Be, has atomic number 4.

(a) (i) Complete the sentence by putting a cross (☒) in the box next to your answer.

From its position in the periodic table (page 2), beryllium is most likely to be a

(1)

☒ **A** metal

☒ **B** halogen

☒ **C** compound

☒ **D** gas at room temperature

(ii) Give the symbol of an atom of another element in the same period of the periodic table as beryllium.

(1)

.....

(b) The atomic number of beryllium is 4.

The mass number of an atom of beryllium is 9.

(i) State the numbers of protons, electrons and neutrons in this atom of beryllium.

(3)

..... protons

..... electrons

..... neutrons

(ii) Complete the sentence by putting a cross (☒) in the box next to your answer.

The relative charge on an electron is

(1)

☒ **A** +1

☒ **B** 0

☒ **C** −1

☒ **D** −2

(c) The electronic configuration of phosphorus is 2.8.5.

Explain, in terms of its electronic configuration, why phosphorus is in group 5 of the periodic table.

(2)

.....

.....

.....

.....

(Total for question = 8 marks)

(**Q02 1SC0/1CF, June 2014**)

Q22.

Elements and atoms

Beryllium, Be, has atomic number 4.

(a) (i) Complete the sentence by putting a cross (☒) in the box next to your answer.

From its position in the periodic table (page 2), beryllium is most likely to be a

(1)

☒ **A** metal

☒ **B** halogen

☒ **C** compound

☒ **D** gas at room temperature

(ii) Give the symbol of an atom of another element in the same period of the periodic table as beryllium.

(1)

.....

(b) The atomic number of beryllium is 4.

The mass number of an atom of beryllium is 9.

(i) State the numbers of protons, electrons and neutrons in this atom of beryllium.

(3)

..... protons

..... electrons

..... neutrons

(ii) Complete the sentence by putting a cross (☒) in the box next to your answer.

The relative charge on an electron is

(1)

☒ **A** +1

☒ **B** 0

☒ **C** −1

☒ **D** −2

(c) The electronic configuration of phosphorus is 2.8.5.

Explain, in terms of its electronic configuration, why phosphorus is in group 5 of the periodic table.

(2)

.....

.....

.....

.....

(Total for question = 8 marks)

(**Q02 1SC0/2CF, June 2014**)

Q23.

* The structure of the periodic table and the position of the elements in the periodic table are linked to the electronic configuration of the elements.

Figure 10 shows the structure of the periodic table and the first 12 elements with their atomic numbers.

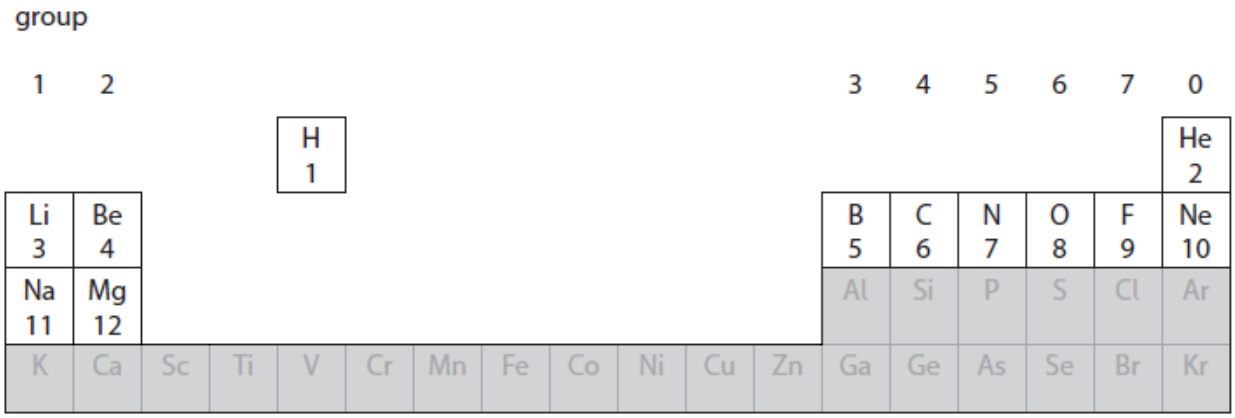


Figure 10

Use the first 12 elements shown in Figure 10 to explain

- how the structure of the periodic table is linked to the electronic configuration of the atoms of the elements
- how the arrangement of the elements is linked to their electronic configuration.

(6)

(Total for question = 6 marks)

(**QU05b 1SC0/1CF, June 2025**)

Q24.

Explain how the electronic configuration of an atom of potassium is related to its position in the periodic table.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)

(**Q03b 1SC0/2CH, Nov 2021**)

Q25.

Nitrogen, N_2 , oxygen, O_2 and fluorine F_2 are all gases.

Nitrogen, oxygen and fluorine are in the same period of the periodic table.

Explain, in terms of electronic configuration, in which period of the periodic table nitrogen, oxygen and fluorine are located.

.....

.....

.....

.....

(Total for question = 2 marks)

(**QU03a 1SC0/1CH, June 2025**)

Q26.

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

Calcium has an atomic number of 20.
A calcium atom has a mass number of 40.

(i) Which row of the table shows the number of protons and number of neutrons in this atom of calcium?

(1)

	number of protons	number of neutrons
☒ A	20	20
☒ B	40	20
☒ C	20	60
☒ D	60	20

(ii) Figure 6 shows the arrangement of electrons in an atom of calcium.

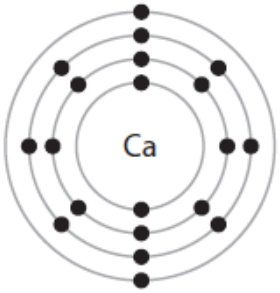


Figure 6

Explain, using the information in Figure 6, in which period of the periodic table calcium can be found.

(2)

.....

.....

.....

.....

(Total for question = 3 marks)

(**Q05a 1SC0/1CH, Nov 2020**)

Q27.

Figure 4 shows some information about the group 1 metals.

group 1 metal	atomic number	relative atomic mass
lithium	3	7
sodium	11	23
potassium	19	39
rubidium	37	85
caesium	55	133

Figure 4

Explain, in terms of their electronic configurations, why these metals are placed in group 1 of the periodic table.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)

(**QU02a 1SC0/2CH, June 2023**)

Q28.

Potassium and caesium are in the same group of the periodic table.

Explain, in terms of electrons, why potassium and caesium are in the same group.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)

(**Q05b 1SC0/2CF, Nov 2020**)

Q29.

Nitrogen and oxygen are present in the air.

(a) In industry, nitrogen and oxygen are obtained from air.

(i) Give the name of the process used.

(1)

.....

(ii) State why the air is cooled before the start of the process.

(1)

.....

.....

(b) Complete the sentence by putting a cross (☒) in the box next to your answer.

Oxygen has a low boiling point because there are

(1)

☒ **A** weak covalent bonds between the oxygen atoms

☒ **B** weak covalent bonds between the oxygen molecules

☒ **C** weak forces of attraction between the oxygen atoms

☒ **D** weak forces of attraction between the oxygen molecules

(c) Another gas present in air is carbon dioxide, CO_2.
There are covalent bonds between the atoms in a molecule of carbon dioxide.

(i) Describe what is meant by a**covalent bond.**

(2)

.....

.....

.....

(ii) The electronic configuration of oxygen (atomic number 8) is 2.6.

Give the electronic configuration of carbon (atomic number 6).

(1)

.....

(iii) Draw a dot and cross diagram of a molecule of carbon dioxide.

Show outer electrons only.

(2)

(Total for Question = 8 marks)

(**Q12 1SC0/1CH, June 2013**)

Q30.

Nitrogen and oxygen are present in the air.

(a) In industry, nitrogen and oxygen are obtained from air.

(i) Give the name of the process used.

(1)

.....

(ii) State why the air is cooled before the start of the process.

(1)

.....

.....

(b) Complete the sentence by putting a cross (☒) in the box next to your answer.

Oxygen has a low boiling point because there are

(1)

☒ **A** weak covalent bonds between the oxygen atoms

☒ **B** weak covalent bonds between the oxygen molecules

☒ **C** weak forces of attraction between the oxygen atoms

☒ **D** weak forces of attraction between the oxygen molecules

(c) Another gas present in air is carbon dioxide, CO_2.
There are covalent bonds between the atoms in a molecule of carbon dioxide.

(i) Describe what is meant by a**covalent bond.**

(2)

.....

.....

.....

(ii) The electronic configuration of oxygen (atomic number 8) is 2.6.

Give the electronic configuration of carbon (atomic number 6).

(1)

.....

(iii) Draw a dot and cross diagram of a molecule of carbon dioxide.

Show outer electrons only.

(2)

(Total for Question = 8 marks)

(Q02 1SC0/2CH, June 2013)

Q31.

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

An atom of potassium has atomic number 19 and mass number 39.

(i) Give the electronic configuration of this potassium atom.

(1)

.....

(ii) This potassium atom forms the ion K^+.

Which row shows the number of protons and the number of neutrons in this potassium ion, K^+?

(1)

	number of protons	number of neutrons
☒ **A**	19	19
☒ **B**	19	20
☒ **C**	20	19
☒ **D**	20	20

(Total for question = 2 marks)

(Q05a 1SC0/2CF, Nov 2020)

Q32.

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

An atom of potassium has atomic number 19 and mass number 39.

(i) Give the electronic configuration of this potassium atom.

(1)

.....

(ii) This potassium atom forms the ion K^+.

Which row shows the number of protons and the number of neutrons in this potassium ion, K^+?

(1)

	number of protons	number of neutrons
☒ **A**	19	19
☒ **B**	19	20
☒ **C**	20	19
☒ **D**	20	20

(Total for question = 2 marks)

(**Q01a 1SC0/2CH, Nov 2020**)

Q33.

In Figure 5, the letters **A**, **E**, **G**, **J**, **X** and **Z** show the positions of six elements in the periodic table.

These letters are not the symbols of the atoms of these elements.

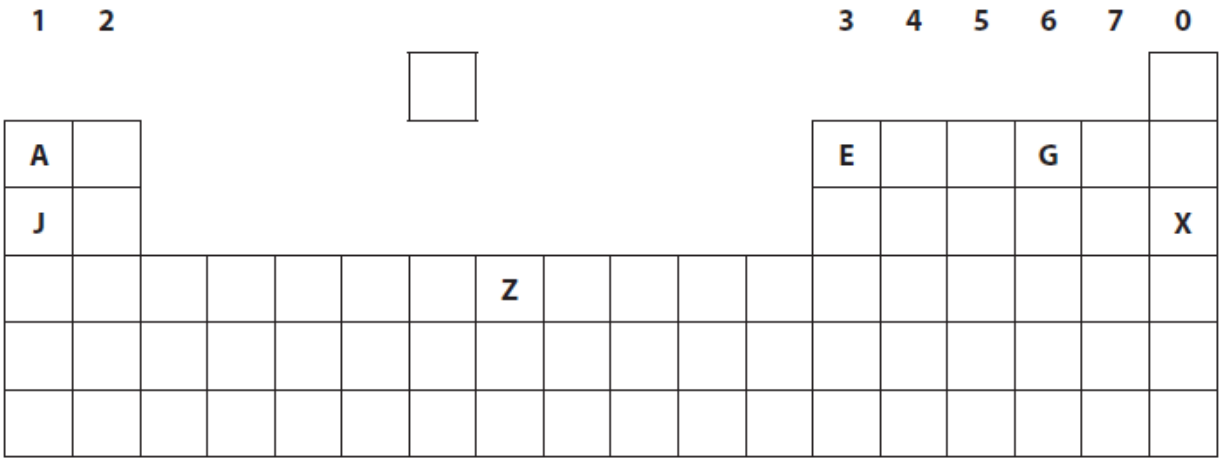


Figure 5

Using the letters **A**, **E**, **G**, **J**, **X** and **Z**

(i) give the letters of the **two** elements that are non-metals

(1)

.....

(ii) give the letters of **two** elements in period 2

(1)

.....

(iii) give the letter of an element that normally forms an ion with a charge of +1.

(1)

.....

(Total for question = 3 marks)

(**Q05a 1SC0/1CF, June 2019**)

Q34.

In Figure 1, the letters **A**, **E**, **G**, **J**, **X** and **Z** show the positions of six elements in the periodic table.

These letters are not the symbols of the atoms of these elements.

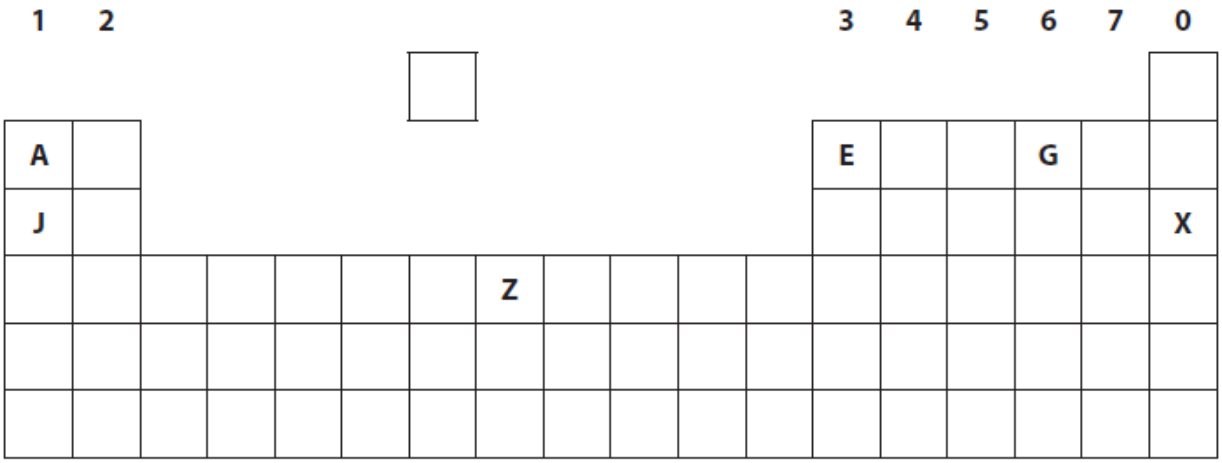


Figure 1

Using the letters **A**, **E**, **G**, **J**, **X** and **Z**

(i) give the letters of the **two** elements that are non-metals

(1)

.....

(ii) give the letters of **two** elements in period 2

(1)

.....

(iii) give the letter of an element that normally forms an ion with a charge of +1.

(1)

.....

(Total for question = 3 marks)

(**Q01a 1SC0/1CH, June 2019**)

Q35.

This question is about elements in group 1 of the periodic table.

Figure 1 shows the symbols of the first three elements in group 1 of the periodic table and their melting points.

symbol	melting point in °C
Li	181
Na	98
K	64

Figure 1

Use the periodic table to answer these questions.

(i) Give the symbol of **another** element in group 1.

(1)

.....

(ii) Give the atomic number of lithium.

(1)

.....

(iii) Describe the trend in the melting points of the elements in Figure 1.

(2)

.....

.....

(Total for question = 4 marks)

(**QU01a 1SC0/2CF, June 2019**)

Q36.

This question is about elements in group 1 of the periodic table.

Figure 1 shows the symbols of the first three elements in group 1 of the periodic table and their melting points.

symbol	melting point in °C
Li	181
Na	98
K	64

Figure 1

Use the periodic table to answer these questions.

(i) Give the symbol of **another** element in group 1.

(1)

.....

(ii) Give the atomic number of lithium.

(1)

.....

(iii) Describe the trend in the melting points of the elements in Figure 1.

(2)

.....

.....

(Total for question = 4 marks)

(**QU01a 1SC0/2CF, June 2022**)

Q37.

The periodic table is very useful to chemists.

(a) Complete the sentence by putting a cross (☒) in the box next to your answer.

The periodic table is a table of

(1)

☒ **A** mixtures

☒ **B** elements

☒ **C** compounds

☒ **D** solutions

(b) Complete the sentence by putting a cross (☒) in the box next to your answer.

Group 1 in the periodic table contains

(1)

☒ **A** transition metals

☒ **B** noble gases

☒ **C** halogens

☒ **D** alkali metals

(c) The table shows some of the gases in group 0 and some of their properties.
The gases are shown in the order in which they appear in group 0.

(i) Fill in the three spaces in the table.

gas	atomic symbol	density / g dm^{-3}	reaction with metals
helium	He	0.12	no reaction
neon	Ne	1.44	no reaction
argon	Ar		no reaction
krypton		3.00	no reaction
xenon	Xe	3.56	

(ii) Some light bulbs contain a metal filament.



These light bulbs are filled with argon.

Explain why argon, instead of air, is used inside these light bulbs.

(2)

.....

.....

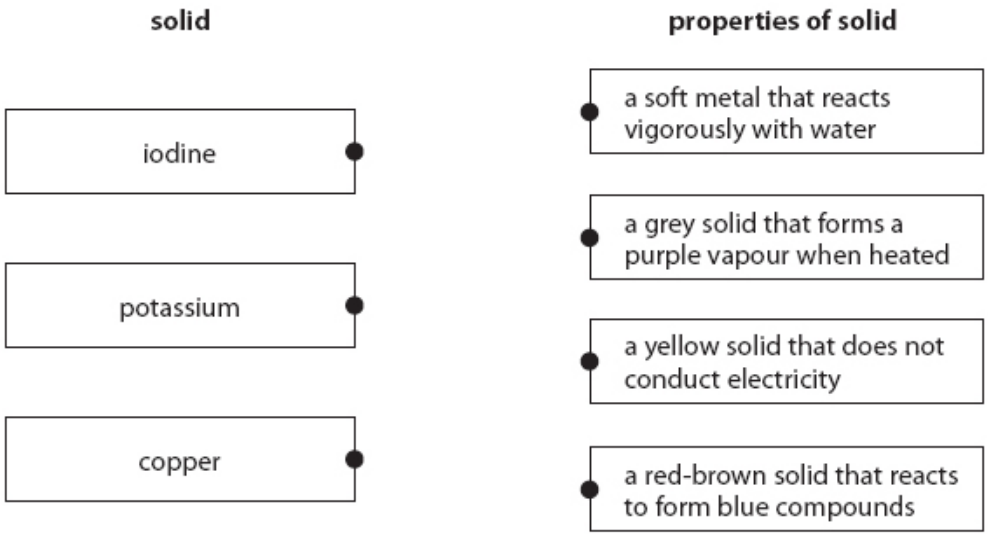
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(d) The table shows some solids and some properties of solids.

Draw **one** straight line from each solid to properties of that solid.



(Total for Question = 9 marks)

(**Q07 1SC0/1CF, June 2013**)

Q38.

The periodic table is very useful to chemists.

(a) Complete the sentence by putting a cross (☒) in the box next to your answer.

The periodic table is a table of

(1)

☒ **A** mixtures

☒ **B** elements

☒ **C** compounds

☒ **D** solutions

(b) Complete the sentence by putting a cross (☒) in the box next to your answer.

Group 1 in the periodic table contains

(1)

☒ **A** transition metals

☒ **B** noble gases

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(ii) Some light bulbs contain a metal filament.



These light bulbs are filled with argon.

Explain why argon, instead of air, is used inside these light bulbs.

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.....

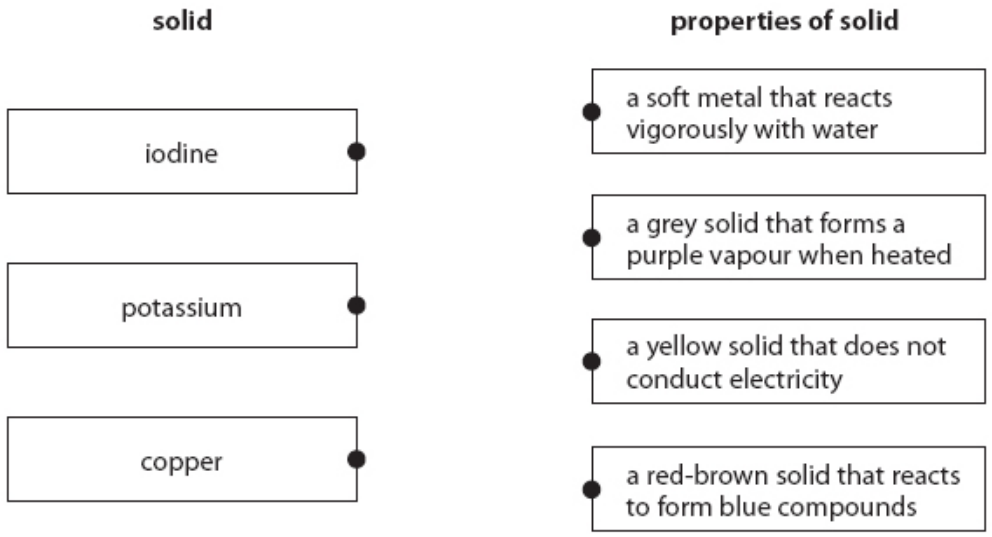
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(d) The table shows some solids and some properties of solids.

Draw **one** straight line from each solid to properties of that solid.



(Total for Question = 9 marks)

(**Q01 1SC0/2CF, June 2013**)

Q39.

Which material is most suitable to make the electrodes for the electrolysis of a dilute acid?

(1)

☒ **A** zinc

☒ **B** sulfur

☒ **C** iron

☒ **D** graphite

(Total for question = 1 mark)

(**Q04b 1SC0/1CH, SAM 2016**)

Q40.

The elements beryllium, magnesium, calcium, strontium and barium are in group 2 of the periodic table.

Each calcium atom contains 20 electrons.

Which of the following is the electronic configuration of a calcium atom?

(1)

☒ **A** 2.8.10

☒ **B** 2.8.8.2

☒ **C** 2.2.8.8

☒ **D** 8.10.2

(Total for question = 1 mark)

(**Q04a 1SC0/1CH, SAM**)

• 2.8 (in 1st and 2nd shell)(1)