[The periodic table]

Q1.(2018)

An element has a **relative atomic mass** of 19.0.

Find this element on the Periodic Table.

How many protons does this element contain?

A 9

B 10

C 19

D 28

Your answer ☐ **[1]**

Q2.(2019)

Fluorine is in Group 7 of the Periodic Table.

Which statement best describes fluorine?

A It has a full outer shell of electrons

B It is a metal

C It is a non-metal

D It is a solid at room temperature and pressure

Your answer ☐ **[1]**

Q3.a(2019)

Sodium is a metal in the Periodic Table.

(i) Use the Periodic Table to work out the following:

The **relative atomic mass** of sodium = ...

The number of **protons** in an atom of sodium = ...

The number of **electrons** in an atom of sodium = ...

[3]

Q3.b(2019)

Sodium is an example of an atom that can form an ion.

Describe what happens to a sodium atom when it becomes an ion.

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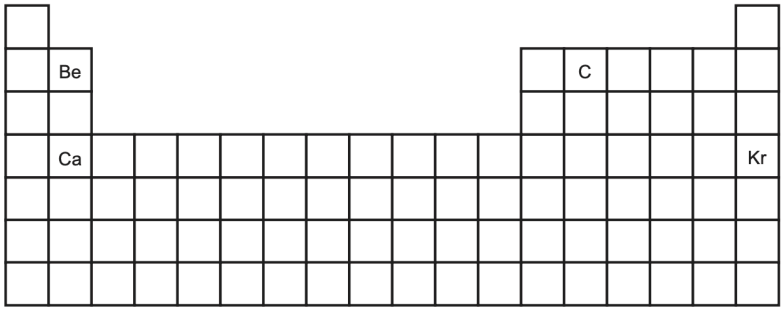
..... **[1]**

Q4.(2021)

In the Periodic Table elements are arranged in Groups and Periods.

Look at the diagram. It shows four elements.



Which element is in **Group 2** and **Period 4** of the Periodic Table?

A Be

B C

C Ca

D Kr

Your answer ☐ **[1]**

Q5.(2021)

An atom of an element forms an ion with the formula X^{2-}.

Which **Group** of the Periodic Table is the element found in?

A Group 0

B Group 2

C Group 6

D Group 7

Your answer ☐ **[1]**

Q6.(2021)

Helium and neon are the first two elements in Group 0 of the Periodic Table.

Look at the symbols for helium and neon.

2
He
4

10
Ne
20

Describe the similarities **and** differences in the atomic structures of helium and neon.

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..... **[6]**

Q7.a(2022)

The table shows some information about the atoms of six elements, **A** to **F**.

Element	Number of protons	Number of neutrons	Number of electrons	Arrangement of electrons
A	11	12	11	2, 8, 1
B	10	10	10	2, 8
C	12	12	12	2, 8, 2
D	6	7	6	2, 4
E	19	20	19	2, 8, 8, 1
F	6	6	6	2, 4

Answer the following questions. Choose your answers from the elements **A**, **B**, **C**, **D**, **E** or **F**.

Each letter can be used once, more than once or not at all.

(i) Which **two** elements are in **Group 1** of the Periodic Table?

Elements = ... and ..... **[1]**

Q7.b(2022)

Which element is in **Period 4** of the Periodic Table?

Element = ... **[1]**

Q7.c(2022)

Which element has a mass number of 12?

Element = ... **[1]**

Q7.d(2022)

Which **two** elements are isotopes?

Elements = ... and ..... **[1]**

Q7.e(2022)

Which element forms an ion with a 2+ charge?

Element = ... **[1]**

Q8.(2024)

Which element in the table is a **non-metal**?

	Appearance at room temperature	Melting point (°C)	Electrical conductivity
A	silver liquid	–39	high
B	orange-red solid	1083	high
C	yellow solid	113	low
D	silvery-white solid	3422	high

Your answer ☐ **[1]**

Q9.(2024)

Write the **symbol** of the element made from atoms with nine protons.

Use the Periodic Table on the Data Sheet.

..... **[1]**

Q10.(2024)

Lithium reacts with oxygen to form lithium oxide.

The symbols for lithium and oxygen on the Periodic Table are:

3
Li
6.9

8
O
16.0

Explain how the positions of lithium and oxygen in the Periodic Table are used to decide that lithium is a metal and oxygen is a non-metal.

Use the Periodic Table on the Data Sheet.

.....

..... **[1]**

Q11.(2024)

A student thinks that sodium reacts in a similar way to lithium.

Explain why they are **correct**.

Use the Periodic Table on the Data Sheet.

.....

..... **[1]**