

## Revision Sheet #2 | Lower Secondary Stage (6-8)

1<sup>st</sup> Semester | 2023-2024

**Subject:** Chemistry

**Chapter 2:** Elements, compounds and mixtures

**Objectives:**

- Define elements, periodic table and atoms
- Write chemical symbols of elements
- Describe properties of some elements and their uses

**Answer key**

1 – Highlight the correct word or phrase in each **bold** pair in the statements below.

Iron and zinc are examples of elements. There is **one/ more that one** type of atoms in iron, and there is **one/ more than one** type of atoms in zinc.

The atoms in iron are **different from/ the same as** the atoms in zinc, so iron and zinc have **the same/ different** properties.

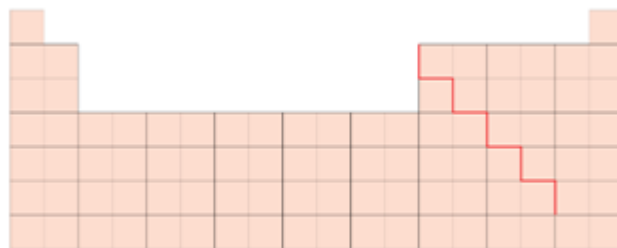
2- Choose a word from the list below to answer each of the following questions.

**atom**                      **model**                      **element**                      **compound**                      **natrium**  
**periodic table**                      **ferrum**                      **chemical symbol**

- a- A substance that is made from one type of atom and cannot be split into other substances. ....**element**.....
- b- The Latin name for iron ...**ferrum** and the Latin name sodium is .....**Natrium**.....
- c- The one-to-two letter code of an element. ....**chemical symbol** .....
- d- The smallest particle of an element that can exist. ....**atom** .....

3- Choose the correct answer.

- Which sentence is completely correct? Choose **one** answer
  - a- The diameter of an atom is 0.0001 cm.
  - b- There are the same number of types of atoms as there are types of elements.**
  - c- Neon atoms are larger than helium atoms, so a neon atom must be made of other smaller type of atoms.
  - d- Each element is made up of one or more type of atoms.
  
- Which sentence is correct? Choose **two** answers.
  - a- An element can be split into other substance if the right conditions are used.
  - b- Substances that have only one type of particle are elements.**
  - c- Every material in the universe is made up of the particles of one or more element.**
  - d- Elements are mixtures of two or more substances.
  
- The diagram shows a simplified periodic table. Which sentence is correct?  
Choose one answer.
  - a- The periodic table lists the most important elements.
  - b- Each square represents one element.**
  - c- The periodic table groups together mixtures with similar properties.
  - d- Elements with different properties are found close together in the periodic table.



4- The diagram shows a simplified part of a periodic table.

H hydrogen								He helium
Li lithium	Be beryllium	B boron	C carbon	N nitrogen	O oxygen	F fluorine	Ne neon	
Na sodium	Mg magnesium	Al aluminium	Si silicon	P phosphorus	S sulfur	Cl chlorine	Ar argon	

a- Which of the following are chemical symbols for metal elements?

Si                      **Al**                      S                      Ar                      **Na**

b- Name the element that can be found in all living things. ...**Carbon**.....

c- Name two elements that are found in the atmosphere. ....**Hydrogen and Helium**

d- Explain why can't we find H<sub>2</sub>O in the periodic table.

**Because the periodic table lists only elements and H<sub>2</sub>O can be split into two substances (Hydrogen and Oxygen)**

e- What other elements would have similar properties as Helium? Name two.

**Elements in the same group as Helium : Neon and Argon.**

5- Different elements have different properties. Match each element description on the left with the correct use on the right.

Helium is a gas that is lighter than air.

Neon is a gas that glows when electricity passes through it.

Gold is a shiny metal.

Aluminium is a light, non-toxic metal.



6- Complete the following table.

Name of the element	Chemical symbol
hydrogen	<b>H</b>
<b>Beryllium</b>	Be
potassium	<b>K</b>
<b>Neon</b>	Ne
carbon	<b>C</b>
calcium	<b>Ca</b>
<b>Sodium</b>	Na
phosphorus	<b>P</b>
fluorine	<b>F</b>
<b>Chlorine</b>	Cl
lithium	<b>Li</b>
<b>Sulfur</b>	S
Magnesium	<b>Mg</b>