

# Revision Sheet #1 Answer Key | Lower Secondary Stage (6-8)

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

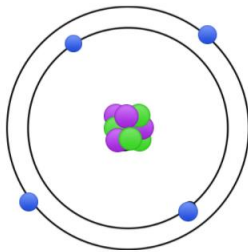
**Subject:** Science/ Chemistry

**Chapter:** 4

**Objectives:**

- Understand that the periodic table is a way to sort elements.
- Identify different groups in the periodic table.
- Describe Acids, Bases and Alkalis.

**1 – Name the structure below and then answer the following questions about it.**



This is a/an **atom** \_\_\_\_\_

It is the smallest unit of matter that forms **elements** \_\_\_\_\_

a- Referring to the periodic table, give the name of the element that the above structure represents. **Berelium**

b- In which group will you find this element? **Group 2**

c- What type of element is it? **Metal**

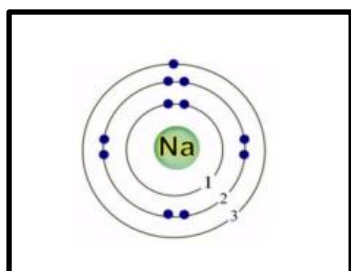
d- Name two other elements that you find in the same group.

**Magnesium – Calcium – Barium – Radium**

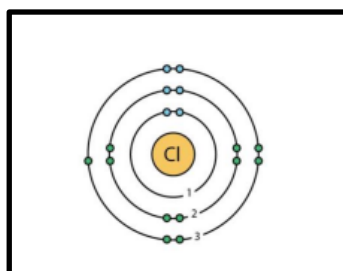
e- When this element reacts with Oxygen it forms an oxide that is used in nuclear reactors. Write down the chemical formula for this compound.

**BeO**

f- Referring to the periodic table, draw the basic units for **Na** and **Cl**.



Sodium



Chlorine

**2- Choose the correct answer.**

A solution with a pH 8.6 indicates

- a- a strong acid
- b- a weak acid
- c- a strong alkali
- d- a weak alkali

An indicator turns into dark red when added to an acidic solution. This means that this solution is

- a- diluted
- b- alkaline
- c- neutral
- d- corrosive

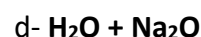
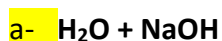
When a very strong alkali reacts with the universal indicator it will change into

- a- dark red
- b- blue
- c- green
- d- dark purple

When Hydrochloric Acid reacts with Potassium Hydroxide the salt will be

- a- Sodium Chloride
- b- Potassium Chloride
- c- Potassium Oxide
- d- Potassium Chloride

When Sulphuric Acid ( $\text{H}_2\text{SO}_4$ ) reacts with Sodium Hydroxide ( $\text{NaOH}$ ) the products are



Which of the following is an alkali?

a- water

b- orange juice

c- dishwashing detergent

d- vinegar

Choose the correct statement

a- Only acids conduct electricity

b- Only alkalis conduct electricity

c- Acids and alkalis don't conduct electricity

d- Acids and alkalis conduct electricity

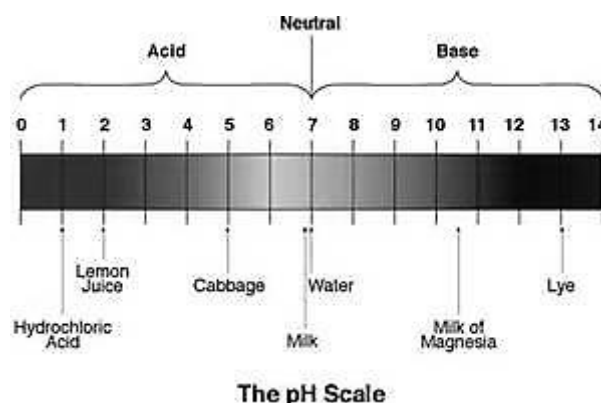
According to the pH range given in the image, which substance is more acidic than lemon juice?

a-  $\text{HCl}$

b- Milk

c- Water

d- Lye



Which of the following is not a base?

a-  $\text{NaOH}$

b-  $\text{NH}_4\text{OH}$

c-  $\text{HNO}_3$

d-  $\text{Ca}(\text{OH})_2$

3 – Estimate the pH for the following substances.

	Estimated pH
Baking soda	8-9
Lemon juice	2-3
Hand soap	10
Water	7
Bleach	13
Corrosive acid	1