

**Class-10(Chemistry)**

**Vacation work sheet**

**Chapter-4& 11**

**Subject Teacher- Syeeda Sultana**

**Date-25.07.2020**

- ❖ Watch the lecture videos on periodic table which have uploaded for class-9 on website and complete the sample creative questions which are given below with the help of text book and lecture videos.
- ❖ Revise the questions which have given in the topic-wise uploaded work sheets with videos on chapter-11 (Mineral resources; Fossils)

❖ **Creative questions:**

1.

Element	X	Two protons less of the indicated atom than Cl.
	Y	Situated at the 4 <sup>th</sup> position at the right side of Ca in periodic table.
	Z	Situated in the 4 <sup>th</sup> period and group no. II.

- a) What is called coinage metal?
  - b) Is it possible to find the I<sub>2</sub> in liquid state? Explain it.
  - c) By the electronic configuration find the position of “Y” in periodic table.
  - d) Analyze the order of the atomic size of the three elements of X, Y and Z.
2. P, Q and R three elements having proton number 21, 29 and 18 respectively in nucleus.
- a) Write down the octave rule.
  - b) Why is calcium metal called alkaline metal? Explain it.
  - c) Find out the position of P element in the periodic table with the help of electronic configuration.
  - d) Are both Q and R elements follow the general rule of electronic configuration? Analyze it.

3.

----	---						B
Na	----						Al
X	Ca	Sc	Ti	Y	-----	Zn	Ga
Z							

- a) Write down Mendeleev’s revised periodic law.
- b) Why is element Ne not interested in forming compounds?
- c) Explain the position of element ‘Y’ in periodic table by distributing electron.

- d) Which of the elements of 'X', 'Y' and 'Z' of the stem has comparatively little atomic radius? Give reasons for your answer.

4.

<b>Li</b>			<b>X</b>
<b>Y</b>	<b>Z</b>	-----	<b>Cl</b>
-----	-----		<b>Br</b>

[Here, X, Y and Z are symbolic; they are not true symbols of any elements]

- Define electronic configuration of element.
- Mention the exceptions of periodic table in short.
- Discuss the bonding between Z and X.
- Arrange X, Y and Z elements according to their atomic radius and ionization energy with logic.

5.

<b>C</b>	<b>X</b>	<b>O</b>	<b>Y</b>	<b>Ne</b>
-----	-----	-----	<b>Cl</b>	<b>Z</b>

[Here, X, Y and Z are symbolic; they are not true symbols of any elements]

- What are halogens?
- Mention law of triads and explain it with example.
- Which one is more electronegative among X, O and Y? Explain.
- Does element Z forms compounds with any other elements of the stem? Justify your answer.

6.

<b>Period</b>	<b>Group-2</b>	----	<b>Group-18</b>
<b>2</b>	<b>X</b>	-----	<b>Ne</b>
<b>3</b>	<b>Mg</b>	----	<b>Y</b>
<b>4</b>	<b>Z</b>	----	<b>Kr</b>

[Here, X, Y and Z are symbolic; they are not true symbols of any elements]

- What is electron affinity?
- Among N, O, F and Cl elements, which have the similar chemical characteristics and why?
- Among X, Mg and Z, which has the highest ionization energy and which has the least? Explain.
- Arrange the elements X, Mg and Z according to their electron affinity with explanation.