**Cairo Governorate Science October Revision**

A M S

**Alsun Modern School**

**East Nasr City Administration 2nd t prep**

**Alsun Modern School Name:……………………….……………**

**[1]Complete:**

1. The scientist …………………….. discovered the main energy levels around the nucleus, while the scientist ……………. Discovered the positive protons inside the nucleus.

2. The modern periodic table consists of ……………… horizontal periods and ………………… vertical groups.

3. Each period starts with …………………… and ends with …………………………….

4. From energy sublevels s, p, d and …………………………

5. The new number of zero group is ………………, while that of (5A) is ………………..

6. The bond between oxygen atom and hydrogen atom in water molecule is ……………………………………………..

7. …………………. Is an example for nonpolar compound.

**[2] Write the scientific term:**

1. The ability of the atom to attract the bond electrons to itself in the covalent compound. [……………………………………………………………….]

2. The block of modern periodic table which contains series of lanthanides and actinides. [……………………………………………………………..]

3. Elements have both properties of metals and nonmetals. [……………………………………..]

**[3] Write the chemical equation to indicate the following :**

1. Reaction between magnesium with oxygen gas.

………………………………………………………………………………………………………………………

2. Then dissolution of the product with water.

…………………………………………………………………………………………………………………………….

3. Dissolving of carbon dioxide with water.

…………………………………………………………………………………………………………………………….

4. Magnesium with dilute hydrochloric acid.

………………………………………………………………………………………………………………………….

**[4] Give one difference between Mendeleev periodic table and Moseley periodic table**

|  |  |
| --- | --- |
|  |  |
| ………………………………………………………  ……………………………………………………… | …………………………………………………………..  …………………………………………………………. |

**[5] Choose:**

1. The number of elements which exist in nature is …………………….

a. 99 b. 118 c. 24 d. 92

1. The elements which occupy the middle of periodic table are called …………………. Elements.

a. alkaline b. inert c. halogen d. transition

2. Aluminium (13Al) located in period ………………………….

a. 3 b. 2 c. 7 d. 5

**[6] Locate the position of the following elements in the modern periodic table:**

**1. 10Ne :** …………………………………………………………………………………………………………………………………………………………………………………………………………………………

**1.12Mg:**

………………………………………………………………………………………………………………………………………………………………………………………………..………………………

**3. 13Al:**

………………………………………………………………………………………………………………………………………………………………………………………………………………………..

1. **16S :**

……………………………………………………………………………………………………………………………………………………………………………………………………………………

1. **17Cl :** ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………
2. **19K :**

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

**7. 20Ca :** …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**[7] Write the atomic number of the following:**

1. Inert gas lies in the second period.

……………………………………………………………………………………………………………………………

2. A nobel gas locates in the third period

…………………………………………………………………………………………………………………………..

3. Metallic element, its valency is divalent and locates in the third period.

…………………………………………………………………………………………………………………………

4. An element is located in the 1st period and group (1A).

………………………………………………………………………………………………………………………….

**[8] Put (√) or (x) and correct the mistake:**

1. The elements with the same physical and chemical properties have been put in vertical columns. ( )

………………………………………………………………………………………………………………………….

2. Bohr arranged elements ascendingly according to their atomic weights.( )

………………………………………………………………………………………………………………………….

3. If a metal lost one electron or more, it will become negative ion.( )

…………………………………………………………………………………………………………………………

**[9] Give reason for:**

1. Elements of the same group have similar properties.

…………………………………………………………………………………………………………………………………………………………………………………………………………………….…..

2. Water molecule is from polar compounds.

………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. Ammonia is considered polar covalent compound.

…………………………………………………………………………………………………………………………..

…………………………………………………………………………………………………………………………..

**[10] Define:**

1. Chemical activity series:

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………