



**4- What is the meant by :**

- 1- Metals :.....
- 2- Metalloids: .....
- 3- Negative ion :.....

**5- Give reason for:**

- 1- The atomic radius ( size ) decreases by increasing the atomic number within a period .  
.....
- 2- Hydrogen sulphide is not a polar molecule.  
.....
- 3- Sodium has the ability to substitute hydrogen of acids.  
.....

**Main Group in the Modern periodic table****1) Write the scientific term**

- 1- The most active metal . [                    ]
- 2- A gas that is used in cornea preservation . [                    ]
- 3- Non- metal elements are not exist in nature in elementary state .  
[                    ]
- 4- The element which has the largest atomic size . [                    ]
- 5- Group of elements react with water forming alkaline solution  
[                    ]

**2) Complete the following**

- 1- .....is used to transfer the energy from inside the reactor to outside
- 2- The chemical activity of alkali metal .....as the .....increases
- 3- .....emits .....rays which prevent the reproduction of microbial cells .
- 4- As the atomic number increases in group "1A", the atomic size ....., the metallic property .....which the electro negativity .....
- 5- Lithium element .....in water as its density .....than that of water .
- 6- Metal oxides are called .....while non-metals oxides are called.....
- 7- .....is used in the manufacture of electronic slides.

8- Valency of group 2 A is .....while group 7 A is .....

**3) Give reason for:**

1- Rubidium and cesium elements sink in water

.....

2- Elements of group (1) are known as alkali metals

.....

3- Elements of the same group has the same chemical properties.

.....

4- Sodium is kept under the kerosene surface .

.....

5- Group 7 A elements are called Halogens .

.....

**4) What is the importances of :**

1- Silicon

.....

2- Sodium

.....

3- Liquefied Nitrogen

.....

4- Cobelt 60

.....

**Water**

**6- Complete**

1- water molecules consist of .....

2- The density of water in .....state is lower than its density in .....state

3- The hydrogen bond is .....

4- .....and .....are from covalent compounds .

5- .....is the bond between hydrogen atom and oxygen atom in water molecule .

6- Water has .....boiling point .

7- .....is the positive pole of Hoffman's voltmeter .

8- Water has .....effect on litmus solution .

- 9- Mixing of animals and human wastes with water leading to the infection by many diseases such as .....and .....
- 10- water is considered as a good .....solvent .

**2) Write the scientific term:**

- 1- The angle between the two covalent bonds in water. [                    ]
- 2- The bond which links the molecules of water. [                    ]
- 3- They help in the pollution of water [                    ]

**3) Give reason for :**

- 1. Ice floats on water surface .  
.....
- 2. Adding drops of dilute acid to water during its electrolysis.  
.....
- 3. Water is important liquid in distinguishing of fires .  
.....
- 4. Water is more polar than ammonia  
.....
- 5. The high boiling point of water  
.....
- 6. oxygen gas evolves above the anode during water electrolysis  
.....

**4) What's meant by :**

- 1. Hydrogen bond .....
- 2. Water pollution: .....
- 3. Ionization process : .....