

1- Complete the following :

1. by increasing the atomic number in each period , the atomic sizewhile
the electro negativity
2. In water molecule atom attracts the electrons of the bond more thanatom as it has higher
3. Each period starts withand ends with
4. The number of electrons in a positive ion is than that of its atom
5. By increasing the atomic number with in a group, the metallic property.....while the non-metallic property
6. The measuring unit of atomic radius is
7. The elements which have less than 4 electrons at the outer most energy level are called
8. The elementhas the highest electro negativity which equals

2- Write the scientific term:

- 1- The ability of the atom to attract the electron, towards itself in the covalent compounds. []
- 2- The atom of a metallic element that loses one electron or more during the
chemical reactions []
- 3- The arrangement of elements in descending order according to their chemical activity . []
- 4- A gas that is produced due to the reaction between sodium and water.
[]
- 5- Covalent compound, the electro negativity between its elements is relatively high . []

3- Show by a symbolic balanced equations :

- 1- Dissolving the magnesium oxide in water .
.....
- 2- Adding dilute hydrochloric acid to a piece of magnesium.
.....
- 3- Dissolving carbon dioxide in water .
.....

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 metalas theincreases
- 3-emitsrays which prevent the reproduction of microbial cells .
- 4- As the atomic number increases in group “1A”, the atomic size, the metallic propertywhich the electro negativity
- 5- Lithium elementin water as its densitythan that of water .
- 6- Metal oxides are calledwhile non-metals oxides are called.....
- 7-is used in the manufacture of electronic slides.

8- Valency of group 2 A iswhile 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- Cobalt 60

.....

Water

6- Complete

1- water molecules consist of

2- The density of water instate is lower than its density instate

3- The hydrogen bond is

4-andare from covalent compounds .

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

6- Water hasboiling point .

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

8- Water haseffect on litmus solution .

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

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 :.....