

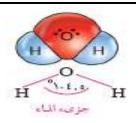
برعاية معالى وزير التربية والتعليم السيد الاستاذ / عجد عبد اللطيف

وتوجيهات مساعد الوزير لشنون تطوير المناهج التعليمية والمشرف على الادارة المركزية لتطوير المناهج

د/ اکرم حسن اداءات وتقییمات

الصف الأول الإعدادي- science

لجنة الاعداد والمراجعة خبراء مكتب تنمية مادة العلوم إشراف علمي مستشار العلوم مستشار العلوم د/ عزيزه رجب خليفة

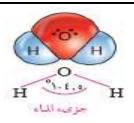




Weekly tests Sixth week First Preparotory Lesson Four

Write the scientific term for each of the following:

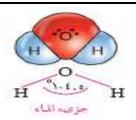
- 1- A metal atom that has lost one electron or more.
- 2- A non-metallic atom has gained one electron or more.
- 3- A bond that results from electrical attraction between a positive ion and a negative ion.
- 4- Compounds that dissolve in water and conduct electricity.
- 5- Compound that conduct electricity but are poor electrical conductors.
- 6- A bond that forms between two atoms of different non-metallic elements or between two similar atoms of a non-metallic element.
- 7- A bond that results from sharing each atom with one electron.
- 8- A bond that results from sharing each atom with two electrons.
- 9- A bond that results from sharing each atom with three electrons.
- 10- The simplest molecule of an organic compound in which a carbon atom is bonded to four hydrogen atoms.





Choose the correct answer:

- 1- An atom of changes into positive ion when it loses an electron (Metal Non-metal Inert gas Halogens)
- 2- An atom of changes into negative ion when an atom gains an electron
 - (Alkaline earth metals Alkali Inert gas Halogens)
- 3- The number of electrons in the potassium ion (k_{19}) is electron (8-18-19-20)
- 4- The number of electrons in outermost energy level of the oxygen ion (O_8) is electron (8-7-9-10)
- 5- The number of energy levels in the sulphur ion (S₁₆) is than energy levels in its atom
 (Greater Less Equal Twice)
- - (Single covalent Double covalent Triple covalent Ionic)
- 9- The molecular formula of a compound resulting from the combination of an element (X) from alkali metals with an element from halogens (Y) $(YX_2 YX X_2Y XY)$





And the bond in the molecules is.....

(Single covalent - Double covalent - Triple covalent - Ionic)

12- The number of bonds in a methane molecules is single covalent bond

13- Which of the following represents an ionic bond?

$$@ [: K:]^{+}[F]^{-} \quad \textcircled{b} \ H \cdots \ \textcircled{o} \cdots \ H \qquad \textcircled{o} \ [Li]^{+}[: Br:]^{-} \quad \textcircled{o} \ \textcircled{o} :: C :: O$$

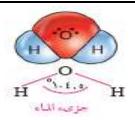
14- An atom of element (X) is binds to two hydrogen atoms as shown in the opposite figure

What is the type of bonding in this molecule? And what is the group number of element (X) in the periodic table?

- a) Ionic / Group 6A
- b) Ionic / Group 2A
- c) Covalent / Group 6A
- d) Covalent / Group 2A
- 15- The ion whose nucleus contains 27 nucleons, including 14 neutrons, has the symbol

$$(SI^{+4} - Al^{+3} - Mg^{+2} - Na^{+1})$$

16- An element from alkaline earth metals combines with and forms ionic bond





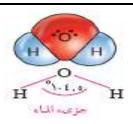
17- The number of energy levels in a hydrogen ion of its atom
(Greater - Less - Equal - Twice)
18- When an atom turns into a positive ion, the number of electrons
(Decreases - Increases - Remains the same - Double)
19- When an atom turns into a negative ion, the number of electrons
(Decreases - Increases - Remains the same - Double)
20- When an atom turns into positive ion, the number of energy levels
(Decrease <mark>s</mark> - Inc <mark>r</mark> eases - Remains the same - Double)
21- when an atom turns into negative ion, the number of energy levels
(Decreases - Increases - Remains the same - Double)

Give one example of each:

- 1- The simplest molecule of an organic compound
- 2- Molecule containing a single covalent bond.
- 3- Molecule containing a double covalent bond
- 4- Molecule containing a triple covalent bond.
- 5- Molecule containing ionic bond.

What happens in the following cases:

- 1- Bonding of a chlorine atom with a sodium atom
- 2- Bonding of a chlorine atom with a hydrogen atom
- 3- Bonding of two chlorine atoms





- 4- Bonding of two hydrogen atoms with an oxygen atom
- 5- Bonding of two oxygen atoms
- 6-Bonding of two nitrogen atoms
- 7-Bonding of a carbon atom to four hydrogen atoms

Correct the underlined part in the following sentences:

- 1- Ionic bond occurs between non-metals and non-metals.
- 2- The covalent bond occurs between two metals.
- 3- The bond in the potassium chloride molecule is covalent.
- 4- The bond between the elements of the sixth group and the elements of the seventh group is ionic.
- 5- The bond in the sodium molecule is double covalent.
- 6- The bond between <u>carbon and oxygen</u> in the methane molecule is a single covalent bond.
- 7- The outermost level in the nitrogen ion (N_7) contains $\underline{5}$ electrons.
- 8- The closest inert gas to the sodium atom (Na₁₁) is helium.