

# Last Look

Second term

By: Mr. Mohamed Taha

## 1) Choose the correct answer:-

- 1- The chemical formula of sodium carbonate is .....  
( $\text{Na}_2\text{CO}_3$  –  $\text{Na}_2\text{SO}_4$  –  $\text{NaNO}_3$  –  $\text{NaOH}$ )
- 2- The biggest planet in the solar system is ..... (Earth – mercury – Jupiter – Venus)
- 3- The percentage of oxygen in the atmosphere is ..... (50% - 71% - 21% - 0.03%)
- 4- The measuring unit of the mass is .... (Newton – Kg – m –  $\text{m/s}^2$ )
- 5- The ..... belongs to igneous rocks. (Marble – limestone – sandstone – granite)
- 6- Planets revolve around the sun in ..... paths. (Circular – elliptical – spiral – irregular)
- 7- Earth's gravity acceleration is changed from a place to another on earth's surface because of .... (Object's mass – earth's mass – the distance from the earth's center – temperature)
- 8- The big sized less dense planet which consists of gaseous elements is the .....  
(Earth – Mercury – Jupiter – Venus)
- 9- Electromagnet is used in making the ..... Set.  
(Calculator- microscope – night vision – electric bell)
- 10- ..... are used in examining and curing sets for human body.  
(Ultrasonic waves – Gamma rays – infrared rays – x- rays)
- 11- The chemical formula of magnesium hydroxide is .....  
( $\text{MgOH}$  –  $\text{MgOH}_2$  –  $\text{Mg}(\text{OH})_2$ )
- 12- The bond of oxygen molecule is ..... (single – double – triple)
- 13- Molten materials under the earth's crust are called ..... (Magma – gases – lava)
- 14- The number of outer planets is ..... (5 – 6 – 4 – 8)
- 15- The earthquake occurs due to .....  
(Volcanoes – vertical faults – horizontal faults – all of them)
- 16- All of the following are insoluble salts in water except .....  
( $\text{AgCl}$  –  $\text{PbSO}_4$  –  $\text{NaCl}$ )
- 17- The earth's inner core contains ..... in a solid state.  
(Iron and copper – nickel and copper – iron and nickel)
- 18- Marble is an example of ..... rocks. (Igneous – metamorphic – sedimentary)
- 19- All these elements can form negative ions except ... ( $_{13}\text{Al}$  –  $_8\text{O}$  –  $_{17}\text{Cl}$  –  $_{16}\text{O}$ )

## **2) Writ the scientific term :**

- 1- Rocky celestial bodies that rotate around the sun in a region between the orbits of mars and Jupiter.
- 2- A bond resulting from sharing of each of the two atoms with three electrons.
- 3- A set of atoms joined together behave like one atom only having a special valence and it can't existed solely.
- 4- Breaking down the reactants bonds and forming new ones among the products.
- 5- A system that consist of thousand of stars.
- 6- An atom of an element does not give or gain any electrons.
- 7- Compounds resulted from the chemical combination between oxygen and a metal or nonmetal.
- 8- The layer of earth which consists of molten metals.
- 9- A molten material exists at depth beneath the earth's crust.
- 10- A bond resulting from the electric attraction between a positive ion and a negative ion.
- 11- The ability of the earth to attract an object to its center.
- 12- The distance covered by light in a year.
- 13- An atom gains an electron or more during chemical reaction.
- 14- A formula represents the number and types of atoms in a molecule.
- 15- Forces used to get radioactive elements used in medicine.
- 16- Compounds dissolve in water producing positive hydrogen ions.
- 17- The number of electrons that the atom gains, loses or shares during chemical reactions.
- 18- Rocks that fall from the space to the earth's surface.
- 19- Group of chemical formulae and symbols show the reactants, products and the conditions of reaction.
- 20- Instruments used to change the mechanical energy into electric energy.
- 21- A group of gases surrounding the earth.
- 22- The ion that turns the color of litmus paper to blue.
- 23- They are bigger units in the universe.
- 24- A technological application is used in cars to stop the forces of inertia when a sudden change in motion occurs.
- 25- An opening in the crust permits the going out of the molten materials and trapped gases.
- 26- It is the property of an object has to resist the change of its phase unless an external force acted on it.
- 27- A zigzag line produced by the earthquake recording.

## **3) Writ the electronic configuration and determine the type of the atom:**

**(Metal – non metal – noble):**



**4) Calculate the weight of a body its mass is 50 kg and the earth's gravity acceleration is  $9.8\text{m/s}^2$ .**

**5) Complete the following statements:**

- 1- The biggest unit of the universe is .....
- 2- At the time of lightning ..... oxides are resulted and affect the nervous system.
- 3- The ..... bond produced compounds not elements.
- 4- The force of gravity between two objects depends on ..... And .....
- 5- The object's weight increases as the height from the earth's center .....
- 6- The motion of the simple pendulum is known as ..... and it is considered as a form of ..... motion.
- 7- The increase of carbon dioxide gas ratio in the atmosphere causes increase in the ..... of the earth, but increase the ratio of carbon monoxide leads to .....
- 8- Friction causes a great loss of mechanical energy because this energy is changed into .....
- 9- The nearest planet to the sun is ....., while the farthest planet to the sun is .....
- 10- The bond of sodium chloride molecule is ..... bond, while the bond in oxygen molecule is ..... Bond.
- 11- Electric generator works on changing ..... energy into ..... energy
- 12-  $\text{NH}_3 + \text{HCl} \longrightarrow$  .....
- 13- ..... and ..... Are accompanied forces with motion.
- 14- Plutonic rocks have crystals with ..... size, while volcanic rocks have crystals with ..... Size.

**6) Having two unmarked tubes, one contains an acid and the other contains a base. How can you distinguish or classify them?**

## **7) Give reasons :**

- 1- Astronauts can't hear each other voices directly in space.
- 2- The bond in an oxygen molecule is a double covalent bond.
- 3- Plutonic igneous rocks has large sized crystals.
- 4- Acids solution turn the color of litmus to be red.
- 5- The density of the outer planets is low.
- 6- We must use safety belts in cars and planes.
- 7- Gravity acceleration changes from one place to another on the earth's surface.
- 8- Sodium is Monovalent, while calcium is divalent.
- 9- Effervescence takes place when HCl acid is added to lime stone
- 10- Burning of meteors before falling on the earth.
- 11- Sodium is a metal
- 12- Stars seem as very small points.
- 13- The chemical equation must be balanced
- 14- Volcanic igneous rocks have small circular holes

## **8) Compare between :**

- |                                    |   |
|------------------------------------|---|
| 1- Inner planets and outer planets | 2- Mechanical and electromagnetic waves |
| 3- Metals and non metals           | 4- Positive and negative ion            |

## **9) Write the chemical formula of the following:**

- |                        |                        |
|------------------------|------------------------|
| 1- Sulphuric acid      | 2- Sodium sulphate     |
| 2- Nitric acid         | 4- Potassium carbonate |
| 5- Magnesium phosphate | 6- Ferrous oxide       |
| 7- Ferric hydroxide    | 8- Silver nitrate      |

**Wishing you all good luck**

**Mr. Mohamed**