

November 15, 2019 (Test review Questions)

Write question and the answer on your notebook. Show me your work on Monday.

YOUR TEST ANSWERS TO THE TEST ARE CONSIDERED INVALID FOR ANY VIOLATIONS OF TEST POLICIES.

1. (5 points) Write the electron configuration for oxygen (O).
2. (5 points) Write the electron configuration for sodium (Na)
3. (5 points) How many valence electrons does sodium(Na) have?
4. (5points) Write the Lewis Electron dot diagram for sodium(Na).
5. (5 points) What is the name used to describe the columns of the periodic table?
6. (5 piints) What is the name used to describe the rows of the periodic table?
7. (5 points) What is the name used to describe the elements of the first columns of the periodic table?

Review Test Questions- For the test on Monday 11/19/2019

1. The state of matter in which a material has definite shape and definite volume is the state.

- a. liquid b. solid c. gaseous d. vaporous

2. Matter that is free to move and fills its available volume is in the state.

- a. liquid b. solid c. gaseous d. elemental

3. What type of matter is formed when two or more elements chemically join?

- a. compound b. element c. heterogeneous mixture d. homogeneous mixture

4. The law that states that mass cannot be created or destroyed in ordinary chemical and physical changes is known as the law of

- a. conservation of mass. b. mass action. c. multiple proportions. d. definite composition.

5. According to the Bohr model of the atom, which particles can exist in any one of a number of energy levels.

- a. electrons b. protons c. neutrons d. Both (b) and (c)

6. Atoms contain equal numbers of

- a. electrons and neutrons. b. protons and neutrons.
c. protons and electrons. d. protons, electrons, and neutrons.

7. The line-emission spectrum of an atom is caused by the energies released when electrons

- a. jump from a lower energy level to a higher energy level.
b. jump from a higher energy level to a lower energy level.
c. jump from the ground state to an excited state.
d. None of the above

8. The atomic mass unit is used to express

- a. atomic mass. b. atomic mass number. c. atomic number. d. molar mass.

9. An atom of potassium has 19 protons and 20 neutrons. Its mass number is

- a. 9. b. 19. c. 20. d. 39.

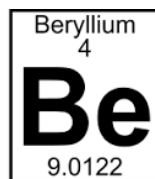
10. Which of the following electron configuration for carbon is correct?

- a. $1s^2, 2s^2, 2p^6, 3s^2, 3p^3$
b. $1s^2, 2s^2, 2p^6, 3s^2, 4p^3$
c. $1s^2, 2s^2, 3s^2, 2p^6, 3p^3$
d. $1s^2, 2s^2, 2p^6, 3s^2, 3p^2$



11. The atomic symbol for beryllium is Be, the figure below indicates that the

- a. atomic number is 4.
b. atomic number is 9.
c. mass number is 4.
d. atomic number is equal to 9 or 4.



12. Using a periodic table, find the identity of the element that has an atomic mass of 40.078 amu.

- a. C b. Ca c. Cr d. Cu

13. In developing his periodic table, Mendeleev listed on cards each element's name, atomic mass, and

- a. atomic number. b. electron configuration. c. isotopes. d. properties.

14. Mendeleev's periodic table did not always list elements in order of increasing atomic mass because he grouped together elements with similar

- a. properties. b. atomic numbers. c. densities. d. colors.

15. An electron that is found in the outermost shell of an atom and determines the atom's chemical properties is called a(n)

- a. valence electron. b. paired electron. c. p electron. d. octave electron.

16. A horizontal row in the periodic table is called a(n)

- a. family. b. group. c. octet. d. period.

17. The periodic law states that the physical and chemical properties of elements are periodic functions of their atomic

- a. masses. b. numbers. c. radii. d. structures

18. A vertical column in the periodic table is called a(n)

- a. family. b. group. c. octet. d. period.

19. Refer to a periodic table. In which period is calcium?

- a. Period 2 b. Period 4 c. Period 6 d. Period 8

20. Refer to a periodic table. In which group is calcium?

- a. Group 1 b. Group 2 c. Group 17 d. Group 18

21. An element that has the electron configuration $[\text{Ne}]3s^23p^5$ is in which group?

- a. Group 2 b. Group 5 c. Group 7 d. Group 17

22. Elements in the s- or p-blocks of the periodic table are called

- a. alloys. b. main-group elements. c. metals. d. transition metals.

23. Elements in Group 18 have

- a. very low reactivity. b. good conductivity. c. very high reactivity. d. metallic character.

24. Elements in Group 1 that react with non-metals to form salts are

- a. alkali-metals. b. halogens. c. lanthanides. d. noble gases.

25. The alkali metals are found on Earth only in compounds because they

- a. have small atoms. b. are very reactive elements. c. are rare elements.
d. are metallic elements.