

Chemistry 0 Unit 1 Review
Assigned on 11/21/2021 Due date: 12/04/2021

1. Which of the following best describes an atom?
 - a. protons and neutrons grouped together
 - b. protons and electrons grouped together
 - c. a core (center) of protons and neutrons surrounded by electrons
 - d. a core of electrons and neutrons surrounded by protons
2. What is the mass number?
3. How many protons are there in Boron?
4. What is the atomic number of Phosphorus?
5. What is the average atomic mass of an atom?
6. What is the element that has 6 valence electrons in the 3rd energy level?
7. If an atom has 8 protons and 8 electrons, how many electrons will be in the first energy level?
8. If an atom has 5 protons and 3 neutrons, how many electrons does it have?
9. If an atom has 16 protons, how many electrons will be in the third energy level?
10. What is the maximum amount of electrons that the 2nd energy level can hold?
11. Covalent bonding is between _____.
12. Ionic bonding is bonding between _____.
13. An example of an ionic compound is...
 - a. H₂O
 - b. CO₂
 - c. O₂
 - d. NaCl
14. What does a Lewis Dot Diagram show?
15. Oxygen, chloride, and fluorine usually form _____ ions.
16. What is the symbol for potassium?

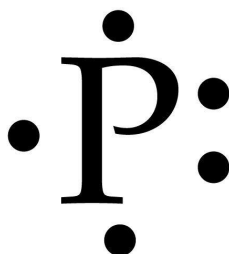
17. How many protons and electrons are there in a neutral beryllium (Be) atom?

18. Indicate which of the following bonds is ionic?

- a. CO_2
- b. H_2O
- c. MgCl_2
- d. CH_4

19. What happens to the electrons in a covalent bond?

20. This is a Lewis dot structure for ___ atom?



Bonus questions:

1. Please draw the Lewis dot structure for Sulfur Dioxide (SO_2) below.

2. Please draw the Lewis dot structure for Aluminum Chloride (AlCl_3) below. Be sure to add charges and brackets.