1. The formula of a salt is XCl2. The X-ion in this salt has 28 electrons. The metal X is Cu.- FALSE, the mental X is Zn
2. Silver has two naturally occurring isotopes 107Ag (106.9051 amu) and 109Ag (108.9048 amu). The average atomic mass of silver is 107.8682 amu. The fraction abundance of 107Ag is 0.5184. TRUE
3. Name of compound NH4Cl (g) is ammonia hydrochloric. FALSE -> ammoni chlorua
4. Almost all of the mass of the atom is concentrated in the nucleus. TRUE
5. The protons and neutrons in the nucleus are very tightly packed. TRUE
6. An element with the outermost electron configuration ns2 np3 would be in group IIIA FALSE -> In group VA
7. The electron configuration of selenium (Se) is [Ar] 4s2 3d10 4p4 . TRUE
8. V has 3 unpaired electrons. TRUE
9. Ca has 2 valence electrons. TRUE
10. Milk tea with bubbles is the example of homogenous mixture. FALSE -> heterogenous mixture
11. Maleic acid, which is used to manufacture artificial resins, has the empirical formula CHO. Its molar mass is 116.1 g/mol. Its molecular formula is C4H4O4. TRUE
12. Ca2+ < Sr2+ < Rb+ < Br- < Se2- is the trend of increasing radius of these following ions.
13. The cation’s ground-state electron configuration of Co(C2H2O3).4H2O is [Ar] 3d7 4s2
14. A positive charge particle found in the nucleus is called electron. FALSE -> proton
15. The reaction of Mg metal with oxygen to form magnesium oxide is an example of a chemical change. FALSE -> chemical property
16. An atom is the smallest particle of an element that maintains the chemical identity of that element. TRUE
17. Molecules that consist of more than one atom are called polyatomic molecules. FALSE -> consist of more than three atoms
18. Elements with atomic numbers of 9, 17, 35, and 53 are members of the halogen family, meaning "salt formers." TRUE
19. In the most fundamental sense, the properties of the elements are periodic functions of their atomic weight. FALSE -> atomic number
20. The elements at the far right of the periodic table, except the noble gases, have the greatest tendency to form anions. TRUE
21. Metals have lower ionization energies than nonmetals. TRUE