

CHEMISTRY UNIT TEST TOPICS LIST

Free Response:

1. Know the difference between a physical change and a chemical change.
2. Know the effect of increasing amount of reactants in a chemical equation and how it effects the number of products.
3. Understand that a chemical equation involves the breaking of bonds and creation of new bonds resulting in changes of composition.
4. Explain how to tell if a chemical equation is balanced, and the law of conservation of mass.
5. Understand what it means for a reaction to be exothermic.
6. Be able to balance chemical equations.
7. Be able to identify the number of protons, neutrons, and electrons for an element from the periodic table.
8. Be able to draw Bohr Models and Lewis Structures.
9. Be able to tell if a bond formed between two elements are ionic or covalent, and explain why.
10. Be able to write a chemical formula from a bonding diagram.
11. Know the trends that occur as you move across rows and columns of the periodic table.

Multiple Choice:

1. Atomic Structure (protons, neutrons, electrons)
2. Charges on Atoms and Subatomic Particles
3. Given atomic mass, determine the number of subatomic particles.
4. Know what the atomic mass and atomic number of an element mean.
5. Know about isotopes, ions, and new elements.
6. Be able to find the number of neutrons in an isotope of an element, given mass and atomic number.
7. Know about ions, and how the charge on the ion changes when it gains/loses electrons.
8. Know that the charge on an ion is positive if electrons are given up, and is negative if electrons are gained when trying to reach noble gas configuration.
9. Ionic vs Covalent Bonds
10. Single, Double, and Triple Covalent bonds.
11. Diatomic Elements
12. Know that valence electrons are the outermost electron orbital, and are involved in bonding.
13. Know what a catalyst is.

- 14. Know about chemical reactions.
- 15. Parts of a chemical equation (reactants, products)
- 16. Dissociation Reactions involve breaking bonds in a compound to form two new products.
- 17. Compounds, Mixtures, Elements
- 18. Balancing Chemical Equations
- 19. Signs of a chemical change.

Look at your notes and old quizzes!!!!