

## Study Guide for Test 3 Chemistry Applications

1. What is the difference between subscripts and coefficients in a chemical formula
2. Determine the charge on an atom when given the formula. (Know what charge groups 1,2,6,7 tend to take on)
3. Determine the formula for a molecule when given the atoms from groups 1,2,6,and 7
4. Identify and name Salts, Acids, or Bases
5. Interpret a chemical equation
  - Determine the reactants and the products
  - Determine if the reaction is balanced
  - Why should a reaction be balanced?
  - Use a balanced equation to convert from moles of one substance to moles of another
6. Use Gram Molecular Weight to convert grams  $\rightleftharpoons$  moles
7. How are the following biomolecules used in the body?
  - Protein
  - Carbohydrate
  - Nucleic Acids
  - Lipids
8. Compare the two types of nucleic acids.
  - a.
  - b.
9. How are cellular products made from the instructions in the genetic material?
10. What is the purpose of Mitosis (cell division)
11. List the structures you would find in a Prokaryotic Cell and a Eukaryotic Cell