**Unit 1 Test Study Guide**

**Be able to:**

Chapter 1

1. Compare and observation and an inference
2. Describe the steps of the scientific method and how scientists draw conclusions
3. Convert kg to g
4. Compare the advantages and limitations of light and electron microscopes
5. Interpret data from graphs and explain it

Chapter 2

1. Explain the relationship or hierarchy of atoms, elements and compounds
2. Explain the properties of adhesion and cohesion and give examples
3. Explain the relationship between monomers and polymers using macromolecules as examples
4. Explain the relationship between an enzyme and a substrate and give an example
5. Design an experiment to determine if an unknown is a lipid, carb, fat or protein
6. Explain how antacids work

Chapter 7

1. Use analogies to describe the function of the different parts of the cell
2. Describe where the macromolecules are found in cells
3. Predict direction of diffusion and rate of diffusion based on concentrations and temperature

Chapter 8

1. Explain why leaves change color in the Fall
2. Draw and label a chloroplast and its parts and describe the functions/reactions that take place
3. Interpret data from a photosynthesis experiment and draw conclusions from the data

Chapter 9

1. Explain what type of respiration is occurring based on products formed