Biology Worksheet

# Instructions

Answer the following questions. Show your work for all calculations.

# Questions

1. Explain the difference between *prokaryotic* and *eukaryotic* cells.
2. What is the basic structural unit of an organism?
   1. Cell
   2. Tissue
   3. Organ
   4. Organ system
3. In the DNA molecule, which nitrogenous base pairs with adenine?
   1. Cytosine
   2. Guanine
   3. Thymine
   4. Uracil
4. What are the products of photosynthesis?
   1. Oxygen and glucose
   2. Water and glucose
   3. Water and carbon dioxide
   4. Oxygen and carbon dioxide
5. Calculate the magnification of a microscope if the objective lens has a magnification of 20x and the eyepiece has a magnification of 10x.
6. What is the function of the *mitochondria* in a cell?
7. What are the three main components of the cell theory?
8. Name the process by which plants make their own food.
9. Which of the following is an example of a prokaryotic organism?
   1. Yeast
   2. Amoeba
   3. Bacteria
   4. Human
10. What is the primary function of the *cell membrane*?