

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?
 - a) Cell
 - b) Tissue
 - c) Organ
 - d) Organ system
3. In the DNA molecule, which nitrogenous base pairs with adenine?
 - a) Cytosine
 - b) Guanine
 - c) Thymine
 - d) Uracil
4. What are the products of photosynthesis?
 - a) Oxygen and glucose
 - b) Water and glucose
 - c) Water and carbon dioxide
 - d) 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?

- a) Yeast
- b) Amoeba
- c) Bacteria
- d) Human

10. What is the primary function of the *cell membrane*?