

Cells Quiz 35

1)a) What is a cell?

b) State the cell theory.

2) The human eye can see an object with a diameter of 0.10 mm. What is the smallest diameter of an object that can be seen through a microscope with a magnification of 500?

3) Name an organism which consists of one cell.

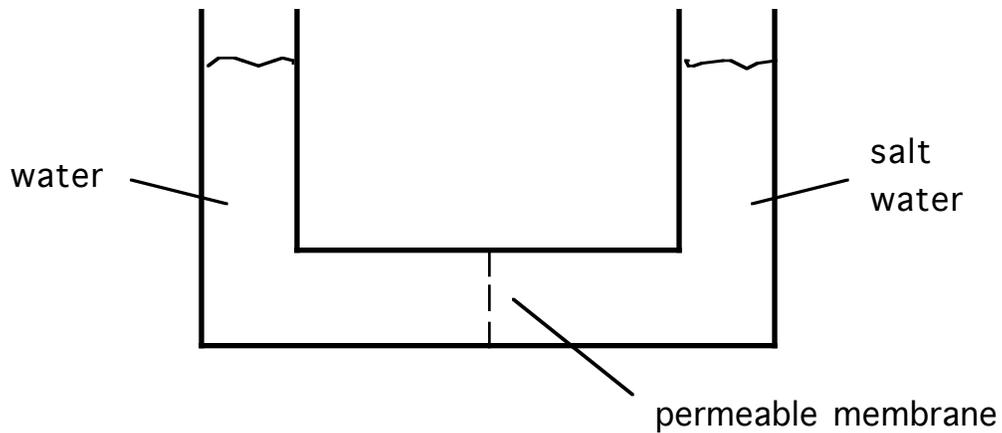
4) Name the three main parts of the cell.

5) Give two functions of the cell membrane.

6)a) Diffusion occurs when molecules move from a _____ (high or low) concentration to a _____ (high or low) concentration.

b) What is osmosis?

7) Explain what happens in the experiment below. The water levels are the same on both sides of the U-tube at the start.



8) What is the function of the nucleus?

9) The DNA of a cell is found in the nucleus. What is its purpose?

10) What is photosynthesis?

11) What is respiration?

12) **Matching** (Put a letter in the space provided. Use all letters)

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|---------------------------------|---------------|-----|
| a) they make proteins | mitochondrion | () |
| b) stores waste | nucleus | () |
| c) not found in animal cells | organelles | () |
| d) holds the cell together | ribosomes | () |
| e) produces energy | cell membrane | () |
| f) makes starch | vacuole | () |
| g) it tells the cell what to do | chloroplast | () |

h) these are the organs of cells cell wall ()

Answers: 1)a) The cell is the basic unit of all living things., b) All living things are made of cells., 2) 0.0002 mm., 3) bacteria, 4) membrane, nucleus, cytoplasm, 5) It holds the cell together and allows the passage of certain molecules., 6)a) high, low, b) Osmosis is the diffusion of water., 7) The right side rises and the left side lowers, as water diffuses through the membrane from left to right, because the water concentration is higher on the left., 8) It controls the cell., 9) The DNA is like a computer program. It contains information which is necessary for the cell to grow and reproduce., 10) Photosynthesis is the process where a plant cell converts water and carbon dioxide into sugar(starch) and oxygen., 11) Respiration is the process where sugar is burned to produce energy for an animal cell., 12) e, g, h, a, d, b, f, c.