Cells, Organelles Structure and Function, and Cell Transport

Objectives

At the end of this unit, you should be able to:

Cells and Organelles:
1. be able to label both the plant and animal cell diagrams.
2. match the names of the organelles you were given to do Explain how this complexity speaks to a Creator God. in your Power Point along with leucoplasts and chromoplasts, with descriptions of their structure, as well as their functions. Explain how this complexity speaks to a Creator God.

Quiz 1

3. give the functions of the plasma membrane. Explain how this complexity speaks to a Creator God.
4. draw and label the head and tails of the phospholipid with the glycerol, phosphate heads and fatty acid tails.
5. draw and label the two ways protein can be found in the plasma membrane. Explain how this complexity speaks to a Creator God.
6. draw a diagram of a plasma membrane and label all of the parts. Explain how this complexity speaks to a Creator God.
7. tell the name of the model for the plasma membrane and explain why it is appropriate.
8. give the difference between a cell membrane and a plasma membrane.
9. tell where the cell membrane is found in a living cell.
10. list some of the organelles that have plasma membranes.
11. discuss the bubble lab; explain what is happening and why.

Quiz 2

12. tell the kinds of substances that enter cells and why they need to enter.
13. tell the kinds of substances that leave cells and why they need to leave.
14. give examples of substances leaving and entering cells in the human body and tell why they do this. (think of the diagrams we talked about)
15. tell the organelle that determines which substances enter and leave a cell.
16. list, define and describe the three kinds of transport.
17. define diffusion and give an example
18. define semi-permeable and tell why the plasma membrane is semi-permeable.
19. define osmosis.
20. label the diagram of body cells, blood vessels, lymph vessels and show the direction of movement of different substances.
21. label the “application” diagrams and tell what they have to do with diffusion. Explain how this complexity speaks to a Creator God.
22. describe what was done in the Osmosis/Diffusion Lab, what happened and why? THOROUGHLY!!
23. figure out in new situations what direction the solute or the solvent, water will move.
24. write out the unit verse and the reference.