

Study Guide - Cell Unit Test

Biology

1. Which cell structure contains the cell's genetic material and controls the cell's activities?
2. What do *ribosomes* do?
3. Which cell structure is the main producer of energy for the cell?
4. List two structures you would expect to find in plant cells but not animal cells and identify the function of each of these structures.
5. The cell membrane is made up of a _____ bilayer.
6. Which types of cell transport mechanism are characterized by the movement of molecules from an area of high concentration to an area of low concentration?
7. Which type of cell transport mechanism is characterized by a cell's membrane wrapping around and engulfing a large particle?
8. What is the definition of *osmosis*? Supplement your answer with a diagram that illustrates what osmosis is and how it happens.
9. What is the name of the cell transport mechanism used to get substances through the cell membrane using specialized proteins but does NOT require energy input from the cell?

10. Explain the following terms: *isotonic*, *hypotonic*, *hypertonic*. What would happen to a cell if you put it in a solution of each type?
11. What is the name of the structure found in plant cells that contains *chlorophyll*?
12. The *endoplasmic reticulum* is an extension of which membrane?
13. What is the name of the cell structure that serves as the primary “packaging” area for proteins made by the cell?
14. Which two cellular structures were clearly visible in the cheek cell slides we made in class? Which additional structure was visible in the onion cell slides?
15. What is the most likely cell transport mechanism a cell would use to get rid of an extremely large waste particle?
16. What is the function of *chromosomes*?
17. What is the main difference between *active transport pumping* and *facilitated diffusion*?