

CELL UNIT TEST- CHAPTER 4 & 5 + NOTES

1. What are the 3 points to the Cell Theory?
2. Why is the surface area of a cell an important limiting factor to growth?
3. What are organelles?
4. What are prokaryotes? (What makes them prokaryotes versus eukaryotes)?
5. Give an example of an organism that is a prokaryote and a one that is a eukaryote.
6. What is the function of the following cell parts;
 - a. Cell membrane
 - b. Nucleus
 - c. Chromosomes
 - d. Mitochondria
 - e. Vacuole
 - f. Cell wall
 - g. Chloroplast
 - h. Endoplasmic reticulum
 - i. Golgi apparatus
 - j. Ribosome
 - k. Cytoplasm
7. Be able to identify the parts listed above on a cell diagram.
8. Name the 3 main differences between a plant cell and an animal cell.
9. What do bacterial cells have in common with plant cells? How are they different?
10. What is a tissue? An organ? An organ system?
11. What are the three types of tissues found in plants.
12. Name the organs found in a plant.
13. Is a virus living or non-living? Why?
14. What are the two parts to the structure of a virus?
15. Why can a virus invade living cells?
16. Describe a selectively permeable cell membrane.
17. What does it mean if a cell membrane is impermeable? Permeable?
18. Define these three types of cellular transport:
 - a. diffusion
 - b. osmosis
 - c. active transport
19. What are the two main differences between passive and active transport?
20. Why is osmosis known as the diffusion of water?
21. Which of the three types of cellular transport (diffusion, osmosis or active transport) will occur until it reaches equilibrium?
22. Predict the net movement of water through a cell membrane, given the description of the type of solution that the cell is in
 - a. more solutes in the solution than the cell
 - b. less solutes in the solution than the cell
 - c. equal solutes in both the solution and the cell
23. Describe the endosymbiosis theory and its connection to the development of certain organelles.