

Unit 4 Study Guide

Honors Biology

Answer the following Questions on a separate sheet of paper:

1. What is the function/responsibility of the Plasma Membrane?
2. What will happen to a red blood cell that is placed in distilled water?
3. What happens to a potato that is placed in salt water?
4. What is the energy source for cells?
5. What is the chemical equation for Cellular Respiration?
6. What is the chemical equation for Photosynthesis?
7. A change in what, affects the amount of ATP in cellular respiration?
8. What is the purpose of the mitochondria having an inner membrane that is folded?
9. What is the fuel for Cellular Respiration?
10. When the concentration of solution outside of a cell is equal to that inside of the cell, how does this affect the movement of molecules in and out of the cell?
11. If a cell is placed into a low concentration of solute, what will happen to the cell?
12. Enzymes are what type of macromolecule?
13. What is the function/responsibility of an enzyme?
14. What happens to an enzyme if you increase the temperature of an enzyme?
15. Why are enzymes considered reusable?
16. What is aerobic respiration? Does it give you much energy?
17. What is anaerobic respiration? Be specific.
18. In photosynthesis, how is energy stored?
19. What is a biome? What type of biome uses more carbon?
20. How does cutting large forests' affect the carbon cycle?
21. What trophic level contains the largest amount of energy?
22. How much energy is passed from one trophic level to the next?
23. Which organism within a food chain would most likely have more pollutants and chemicals ingested, the top or the bottom?
24. If a hawk eats a rabbit that eats grass, and you take out the rabbit, what happens to the hawk and grass population?

25. Energy is lost in the form of _____ as you move up the pyramid.
26. What happens if an enzyme has a mutation?