

Midterm Review Sheet #4**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. When particles are moved through a membrane from a region of low concentration to a region of high concentration, the process is called
- diffusion.
 - passive transport.
 - active transport.
 - fermentation.
- _____ 2. An organism with chloroplasts is a
- consumer.
 - prokaryote.
 - producer.
 - centromere.
- _____ 3. What is produced by mitosis?
- two cells
 - two identical nuclei
 - chloroplasts
 - two different cells
- _____ 4. Which one of the following does NOT perform mitosis?
- a prokaryotic cell
 - a human body cell
 - a eukaryotic cell
 - a plant cell
- _____ 5. Oxygen is used to break down food molecules and release energy in a process called
- photosynthesis.
 - cytokinesis.
 - cellular respiration.
 - fermentation.
- _____ 6. Which of the following is a product of photosynthesis?
- glucose
 - carbon dioxide
 - carbon monoxide
 - heat energy
- _____ 7. Which of the following is NOT used to make glucose in photosynthesis?
- H₂O
 - O₂
 - CO₂
 - light energy
- _____ 8. The exchange of materials between a cell and its environment takes place across cell
- mitochondria.
 - membranes.
 - nucleus.
 - nucleolus.
- _____ 9. How would sugar entering a cell that already contains a high concentration of sugar get through a cell membrane and into a cell?
- osmosis
 - active transportation
 - passive transportation
 - the sugar will not go from an area of low concentration to an area of high concentration
- _____ 10. When a cell membrane surrounds a particle, encloses it in a vacuole, and brings the particle into the cell, this is called
- osmosis.
 - active transportation.
 - endocytosis.
 - exocytosis.
- _____ 11. When vacuole are formed at the endoplasmic reticulum or Golgi complex and they carry particles to the cell membrane for export, this is called
- osmosis.
 - active transportation.
 - endocytosis.
 - exocytosis.

- _____ 12. The term that means "outside the cell" is
- a. osmosis.
 - b. active transportation.
 - c. endocytosis.
 - d. exocytosis.
- _____ 13. Photosynthesis means
- a. "within the cell."
 - b. "outside the cell."
 - c. "made by light."
 - d. "breathing."
- _____ 14. Endocytosis means
- a. "within the cell."
 - b. "outside the cell."
 - c. "made by light."
 - d. "breathing."
- _____ 15. Exocytosis means
- a. "within the cell."
 - b. "outside the cell."
 - c. "made by light."
 - d. "breathing."
- _____ 16. _____ is what gives plants their green color.
- a. Water
 - b. Chlorophyll
 - c. Carbon dioxide
 - d. Glucose
- _____ 17. Photosynthesis takes place in
- a. chloroplasts.
 - b. chlorophyll.
 - c. carbohydrates.
 - d. chromatids.
- _____ 18. The equation: $\text{CO}_2 + \text{H}_2\text{O} + \text{light energy} \rightarrow \text{glucose} + \text{O}_2$ is the equation for which of the following processes?
- a. photosynthesis
 - b. cellular respiration
 - c. fermentation
 - d. exocytosis
- _____ 19. The equation: $\text{Sugar} + \text{O}_2 \rightarrow \text{energy (ATP)}$ is the equation for which of the following processes?
- a. photosynthesis
 - b. cellular respiration
 - c. fermentation
 - d. exocytosis
- _____ 20. Cellular respiration takes place in a eukaryotic cell's
- a. nucleus.
 - b. mitochondria.
 - c. endoplasmic reticulum.
 - d. Golgi complex.
- _____ 21. A product of photosynthesis is
- a. oxygen.
 - b. lactic acid.
 - c. carbon dioxide.
 - d. light energy.
- _____ 22. The burning sensation you feel in your muscles after running a long distance is due to the effects of
- a. active transport.
 - b. photosynthesis.
 - c. cellular respiration.
 - d. fermentation.
- _____ 23. Which of the following would have cells that would undergo binary fission?
- a. a potato plant
 - b. a human body
 - c. bacteria
 - d. an insect
- _____ 24. Mitosis is usually divided into _____ stage(s).
- a. one
 - b. two
 - c. four
 - d. six