Name _____ Class_____Date_____

Assessment

Chapter Test

Cell Structure

In the space provided, write the letter of the description that best matches each term.

_____ 1. cytoplasm
_____ 2. eukaryote
_____ 3. cytoskeleton
_____ 4. cell wall
_____ 5. flagellum
_____ 6. organelle
_____ 7. prokaryote
_____ 8. cell membrane
_____ 9. nucleus

a. outer boundary of a cell
b. cell framework made of protein fibers
c. structure outside the cell membrane that provides structure and support
d. threadlike structure that extends from the cell surface and aids movement
e. the fluid of a cell and the structures in the fluid
f. organism made of a simple cell that has free-floating genetic material and few cell structures
g. internal compartment that houses a cell's DNA
h. organism made up of one or more cells that have a nucleus and membrane-bound cell structures
i. specialized cell body inside a cell that performs a specific function

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

_____ 10. Which scientist determined that cells come from other cells?
a. Hooke
b. van Leeuwenhoek
c. Schwann
d. Virchow

_____ 11. As a cell becomes smaller, its surface area-to-volume ratio
a. increases.
b. decreases.
c. stays the same.
d. becomes less important.

_____ 12. Which of the following can be found in a prokaryote?
a. chloroplasts
b. endoplasmic reticulum
c. flagella
d. mitochondria

_____ 13. Which of the following is a characteristic of plant cells but *not* of animal cells?
a. eukaryotic cells
b. prokaryotic cells
c. cell wall
d. multicellularity

_____ 14. Which of the following is *not* part of the cell theory?
a. All living things are made of one or more cells.
b. All cells contain the same organelles.
c. Cells are the basic units of structure and function in organisms.
d. All cells arise from existing cells.

_____ 15. How do prokaryotic cells vary?
a. in cell shape
b. in their ability to move
c. in cell wall composition
d. All of the above

_____ 16. Which of these is responsible for making proteins in all types of cells?
a. Golgi apparatus
b. ribosomes
c. smooth ER
d. lysosomes

_____ 17. Which of the following helps plant cells remain rigid?
a. the cell membrane
b. the nucleolus
c. the capsule
d. the central vacuole

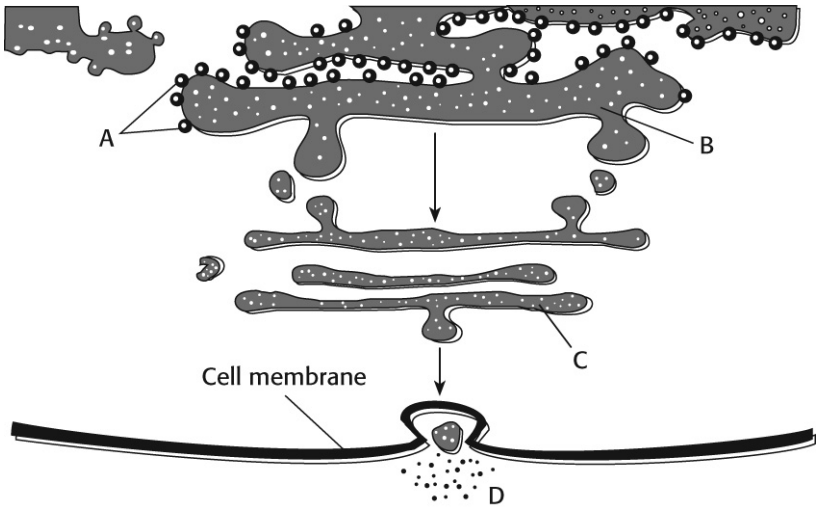
_____ 18. Which of the following enables plants to make sugar from carbon dioxide and water?
a. chloroplast
b. vesicle
c. mitochondrion
d. contractile vacuole

_____ 19. How do eukaryotic cells get energy?
a. They make proteins.
b. They make sugar.
c. The make ATP.
d. All of the above

_____ 20. Which of the following arrangements lists items from simpler to more complex?
a. tissue, cell, organ system, organ
b. cell, tissue, organ, organ system
c. tissue, organ, organ system, cell
d. organ system, organ, tissue, cell

_____ 21. How do cells of a colonial organism differ from cells of a multicellular organism?
a. Cells in a colonial organism adhere to one another, but cells in a multicellular organism do not.
b. Cells in a colonial organism communicate with one another but cells in a multicellular organism do not.
c. Cells in a multicellular organism adhere to one another, but cells in a colonial organism do not.
d. Cells in a multicellular organism communicate with one another but cells in a colonial organism do not.

Questions 22–25 refer to the figure below, which shows structures involved in the packaging and distribution of proteins in a cell.



_____ 22. The structures labeled *A* are
- a. vesicles.
- b. lysosomes.
- c. ribosomes.
- d. chloroplasts.

_____ 23. The structure labeled *B* is
- a. the endoplasmic reticulum.
- b. a Golgi apparatus.
- c. a mitochondrion.
- d. the nucleus.

_____ 24. The structure labeled *C* is
- a. the endoplasmic reticulum.
- b. a Golgi apparatus.
- c. a mitochondrion.
- d. the nucleus.

_____ 25. What is happening at *D*?
- a. Proteins are being produced.
- b. Proteins are being packaged.
- c. Proteins are being repackaged.
- d. Proteins are being released.