

Directions: Write the correct answer in the blank next to the question. Use CAPITAL LETTERS.

____ 1. Which of the following contain a nucleus?

- A. Bacteria
- B. Organelles
- C. Eukaryotes
- D. prokaryotes

____ 2. Many of the specific functions of plasma membranes are carried out by _____ that are embedded in the phospholipid bilayer.

- A. lipids
- B. proteins
- C. phospholipids
- D. carbohydrates

____ 3. Which of the following is a function of the plasma membrane?

- A. keeps the cell wall in place
- B. stores water, salt, proteins, and carbohydrates
- C. regulates which materials enter and leave the cell
- D. all of the above

____ 4. Cell membranes divide the cytoplasm of _____ cells into functional compartments called _____.

- A. eukaryotic...organs
- B. prokaryotic...cytosol
- C. eukaryotic...organelles
- D. prokaryotic...membrane-bound structures

____ 5. How is the plasma membrane similar to the walls that surround a house?

- A. Both protect the inside from the outside.
- B. Both have ways of communicating with the "outside world."
- C. Both allow food to be brought in and wastes to be taken out.
- D. all of the above

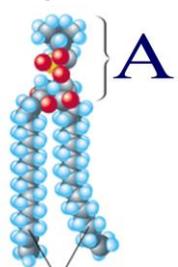
____ 6. Cell membranes are said to be _____ membranes, meaning that they allow some, but not all, materials to simply pass through them.

- A. permeable
- B. impermeable
- C. semipermeable
- D. hyperpermeable

____ 7. The plasma membrane consists of two layers of phospholipids. Phospholipids are composed of

- A. DNA and phosphates.
- B. ribosomes and fatty acids.
- C. hydrophilic "heads" and hydrophobic "tails."
- D. phosphates on one end and proteins on the other.

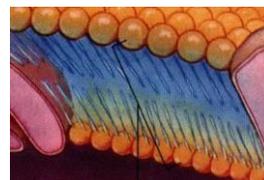
Question 8



____ 8. The part indicated by the letter "A" on the phospholipid molecule shown here is _____.

- A. hydrophilic
- B. hydrophobic
- C. both hydrophilic and hydrophobic
- D. none of the above

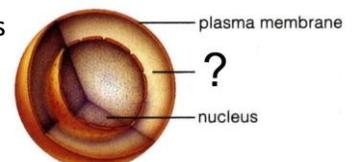
Question 9



____ 9. The basic unit of all cell membranes (as shown in this diagram) is the

- A. lipid layer.
- B. plasma membrane.
- C. phospholipid layer.
- D. phospholipid bilayer.

Question 10



____ 10. The general term for everything inside the plasma membrane EXCEPT the nucleus is

- A. plasma.
- B. cytosol.
- C. cytoplasm.
- D. cryptoplasm.

___ 11. Which of the following is a function of the nucleus?

- A. stores DNA
- B. directs the activities of the cell
- C. contains the information needed to make proteins
- D. all of the above

___ 12. Which organelle breaks down large molecules into particles the cell can use?

- A. lysosome
- B. mitochondrion
- C. Golgi apparatus
- D. endoplasmic reticulum

___ 13. Which organelle releases energy from sugars and other molecules?

- A. chloroplast
- B. mitochondrion
- C. Golgi apparatus
- D. endoplasmic reticulum

___ 14. Which structures carry out animal cell movement?

- A. cilia
- B. nucleoli
- C. ribosomes
- D. chromosomes

___ 15. A thin, flexible barrier around a cell is called the

- A. cell wall.
- B. cytoplasm.
- C. cell envelope.
- D. plasma membrane.

___ 16. Which organelle would you expect to find in plant cells but not animal cells?

- A. ribosome
- B. chloroplast
- C. mitochondrion
- D. smooth endoplasmic reticulum

___ 17. Which cell structure contains the cell's genetic material?

- A. nucleus
- B. organelle
- C. cytoplasm
- D. cell envelope

___ 18. The main function of the cell wall is to

- A. store DNA.
- B. help the cell move.
- C. direct the activities of the cell.
- D. protect the cell and maintain its shape.

___ 19. Which organelle makes proteins using instructions that come from the nucleus?

- A. vacuole
- B. ribosome
- C. mitochondrion
- D. Golgi apparatus

___ 20. Which of the following is NOT a function of the cytoskeleton?

- A. helps the cell move
- B. helps produce proteins
- C. helps the cell maintain its shape
- D. helps organelles within the cell move