

Last Name:	First Name:	Period:	Date:
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It's time to DOMINATE

Biology Unit 1 Test: The Cell

Directions: Write your name on this test AND your answer sheet. You may write on this test, but all answers must be written on your answer sheet. Answer in complete sentences when told to do so.

➤ **GLE LS 1. Compare prokaryotic and eukaryotic cells. (LS-H-A1)**

1. Identify the type of cell found in figure 3.1 [1 point]



FIG. 3.1

- a) Prokaryotic
 - b) Eukaryotic
 - c) Bacterial
 - d) Plant
2. Unlike a eukaryotic cell, as prokaryotic cell does not have ...[1 point]
- a) DNA
 - b) A cell membrane
 - c) Cytoplasm
 - d) A nucleus
- **GLE LS 2. Identify and describe structural differences among organelles (LS-H-A1)**
3. Which organelles supply energy to the cell?
- a) Ribosomes
 - b) Centrosomes
 - c) Mitochondria
 - d) Vacuoles
4. Which organelles contain enzymes that break up old cell parts? [1 point]
- a) Centrosomes
 - b) Lysosomes
 - c) Vacuoles
 - d) Chloroplasts
5. Which features are found in plant cells but not animal cells? [1 point]
- a) Mitochondria and ribosomes
 - b) Vesicles and vacuoles
 - c) Cell walls and chloroplasts
 - d) Centrioles and centrosomes

6. Identify the structure labeled G in Figure 3.3 below. [2 points]

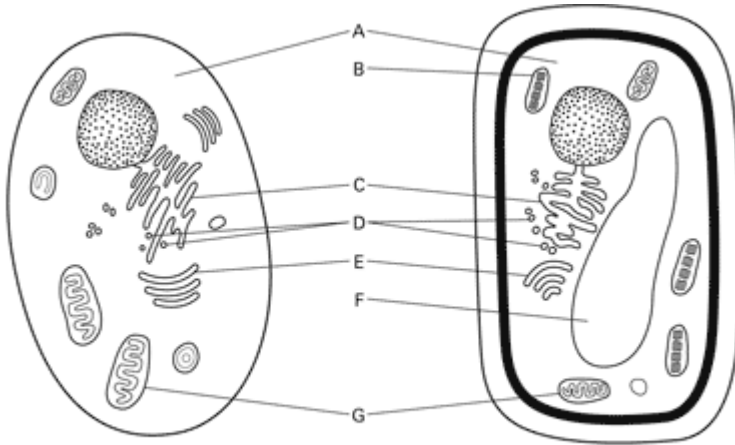


FIG. 3.3

➤ **GLE LS 3. Investigate and describe the role of enzymes in the function of a cell (LS-H-A1)**

7. Which aspect of a chemical reaction is affected by enzymes? [1 point]
- Direction
 - Rate
 - Equilibrium
 - pH

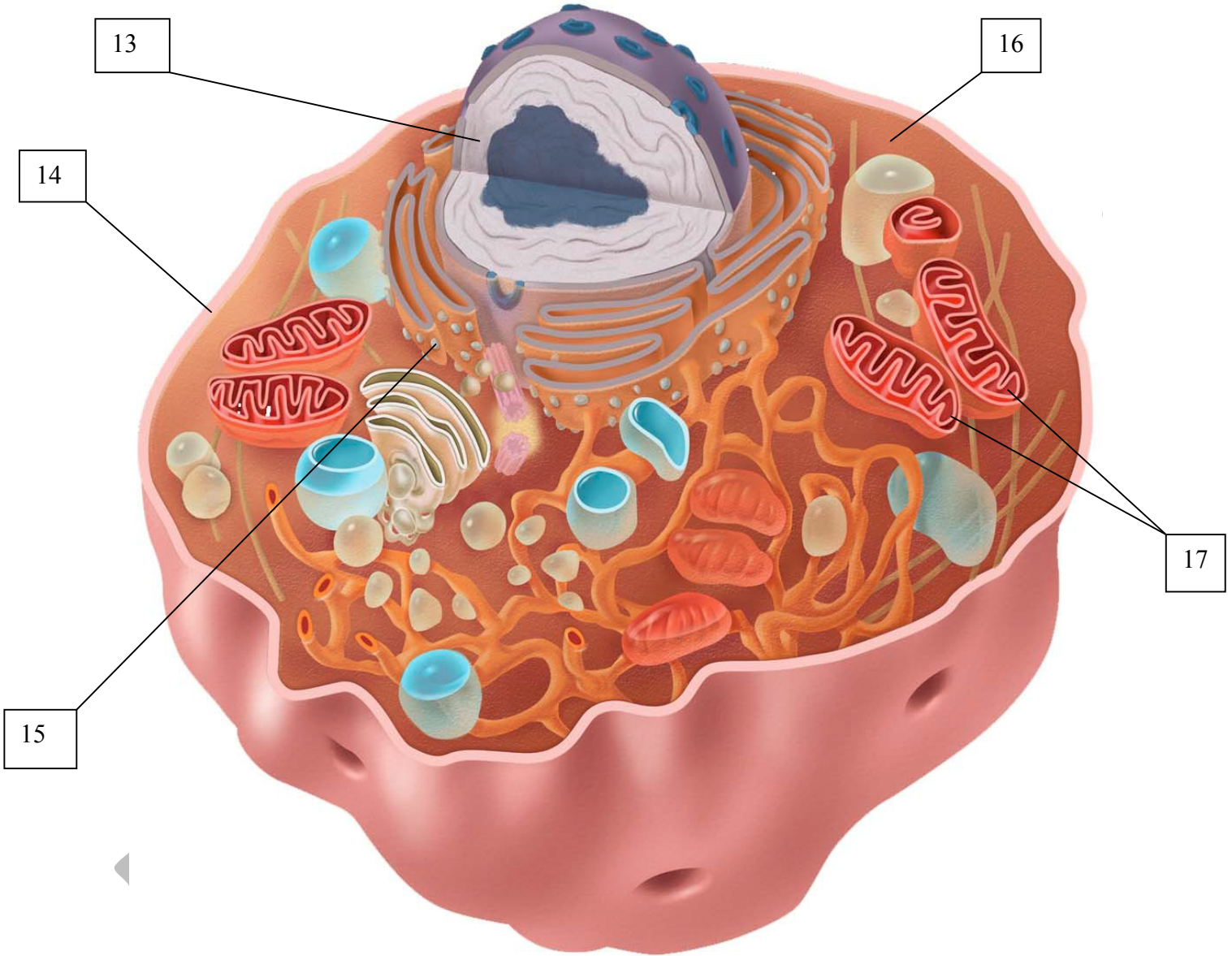
➤ **GLE LS 4. Compare active and passive cellular transport (LS-H-A2)**

8. Which process requires no energy from the cell? [1 point]
- Exocytosis
 - Endocytosis
 - Active transport
 - Facilitated diffusion
9. Which of the following best describes active transport? [1 point]
- Moves substances against concentration gradient
 - Does not use chemical energy
 - Forms a vesicle around a large particle
 - Relies on diffusion of particles

➤ **GLE LS 5. Analyze the movement of water across a cell membrane in hypotonic, isotonic, and hypertonic solutions (LA-H-A2)**

10. A solution that is hypotonic to a cell has... [1 point]
- More solutes than the cell
 - Fewer solutes than the cell
 - The same concentration of solutes as the cell
 - Too many solutes
11. Water enters a cell when the solution surrounding the cell is... [1 point]

Identify the parts of the cell below [1 point each]



13. _____

14. _____

15. _____

16. _____

17. _____

Bonus: Explain the term selective permeability [3 points extra]

ARTIFACT