TEST NAME: Cells Quiz TEST ID: 3187047 GRADE: 10 - Tenth Grade SUBJECT: Life and Physical Sciences TEST CATEGORY: School Assessment



#### 08/14/19, Cells Quiz

- 1. Which of these cell parts contains DNA in the form of linear chromosomes?
  - A cell membrane
  - B. Golgi apparatus
  - C. nucleus
  - D. endoplasmic reticulum
- 2. Which of these cell structures converts nutrients to energy for cell functions?
  - A cell membrane
  - B. chloroplasts
  - C. mitochondria
  - D. endoplasmic reticulum
- 3. bA student builds a plant cell model by arranging different foods in a bowl.

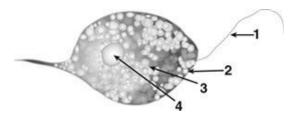


#### In this cell model, what do the different pieces of food represent?

- A substances that the cell consumes
- B. organelles that perform different cell activities
- C. tissues that are formed by different cells
- D. configuration of parts during cell division



- 4. The human body breaks down and eliminates food waste using the organs of the excretory system. Which organelle performs a similar function in humans at the cellular level?
  - A mitochondrion
  - B. endoplasmic reticulum
  - C. lysosome
  - D. Golgi complex
- 5. A researcher observes a nucleus and other membrane-bound structures in a cell. Based on this observation, the researcher can conclude that the cell is classified as a
  - A bacterium.
  - B. virus.
  - C. prokaryote.
  - D. eukaryote.
- 6. Newly made proteins are modified by which organelle?
  - A chloroplast
  - B. endoplasmic reticulum
  - C. mitochondrion
  - D. nuclear envelope
- 7. Look at the diagram below of the protist *Phacus*.



## Which structure represents the flagella?

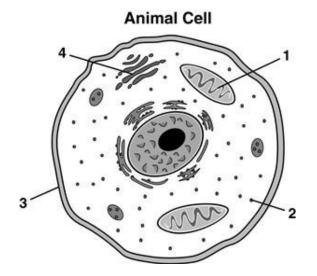
- A Part 1
- B. Part 2
- C. Part 3
- D. Part 4

#### 8. Which structure synthesizes proteins?

- A mitochondria
- B. ribosomes
- C. centrioles
- D. lysosomes



9. A diagram of a cell is shown below.



Which structure controls what enters and leaves the cell?

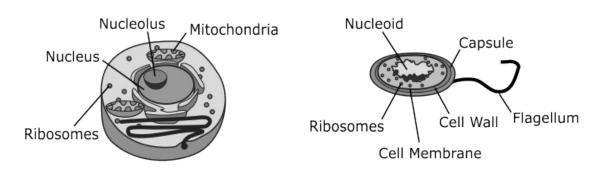
- A 1
- в. 2
- C. 3
- D. 4
- 10. Proteins that are synthesized in the ribosomes undergo extensive modification and are then packaged and directed to the appropriate destination. Which structural component of a cell is involved in this process?
  - A. plasmids
  - B. lysosomes
  - C. mitochondria
  - D. Golgi body
- <sup>11.</sup> How do prokaryotic cells differ from eukaryotic cells?
  - <sup>A</sup> Prokaryotic cells contain mitochondria, unlike eukaryotic cells.
  - B. Prokaryotic cells contain ribosomes, unlike eukaryotic cells.
  - <sup>C.</sup> Prokaryotic cells contain plasmids, unlike eukaryotic cells.
  - D. Prokaryotic cells contain a cell membrane, unlike eukaryotic cells.



<sup>12.</sup> These illustrations show a eukaryotic cell and a prokaryotic cell.

# Eukaryote

Prokaryote



Which of these is a valid comparison of the two cells pictured?

- A The two cells are equal in complexity.
- <sup>B.</sup> Both cells contain DNA.
- c. Both cells transform energy using mitochondria.
- D. Both cells have a rigid, outer barrier for protection.

### 13.



The organelle pictured here is a(n)...

- A. chloroplast
- B. nucleus
- C. ribosome
- D. mitochondrion



- <sup>14.</sup> Which structures are *least likely* to appear in the same eukaryotic cell?
  - A mitochondria and chloroplasts
  - B. ribosomes and mitochondria
  - C. a cell wall and chloroplasts
  - D. small vacuoles and a cell wall
- <sup>15.</sup> Which of the following structures separates the nucleus from its environment?
  - A cell wall
  - B. plasma membrane
  - C. nuclear membrane
  - D. endoplasmic reticulum

