

# Quiz 4.1 - Characteristics of Cells

1. What is the smallest structural and functional unit of living things?

- A. cells
- B. cytoplasm
- C. tissues
- D. organelles

2. Who was the first person to see and name cells?

- A. Charles Darwin
- B. Anton van Leeuwenhoek
- C. Bill Nye
- D. Robert Hooke

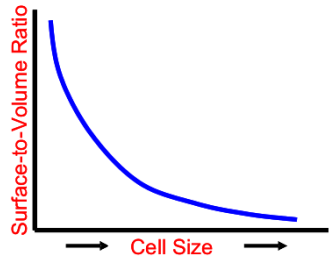


3. Where do cells come from?

- A. organelles
- B. animalcules
- C. other cells
- D. blood

4. The surface-to-volume ratio of a cell limits

- A. the number of organelles that the cell has.
- B. the size of the cell.
- C. where the cell lives.
- D. the types of nutrients that a cell needs.



5. Anton van Leeuwenhoek was the first person to see \_\_\_\_.

- A. cells
- B. organelles
- C. DNA
- D. bacteria and yeast



6. Which of the following statements about cells is FALSE?

- A. All organisms are composed of one or more cells.
- B. All cells come from existing cells.
- C. All cells have a nucleus.
- D. The cell is the basic unit of life in all living things.

7. What holds the cell together and acts as a protective barrier between the outside and inside of the cell?

- A. cell membrane
- B. nucleus
- C. DNA
- D. cytoplasm

8. What are the “little organs” in a cell that are specialized to perform specific jobs?

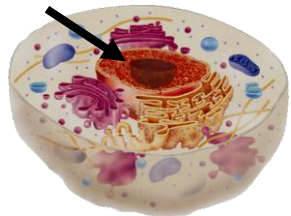
- A. bacteria
- B. cytoplasm
- C. organelles
- D. cell membrane

9. What do we call the fluid or “juice” inside the cell?

- A. DNA
- B. chlorophyll
- C. cytoplasm
- D. nucleus

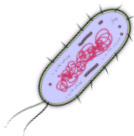
10. What do we call the membrane-covered organelle found in plant and animal cells that contains the DNA?

- A. cytoplasm
- B. nucleus
- C. DNA membrane
- D. prokaryote



11. What type of cell does NOT have a nucleus?

- A. prokaryotic cell
- B. animal cell
- C. eukaryotic cell
- D. plant cell



(made of)

12. Which of the following organisms are composed of eukaryotic cells?

- A. animals
- B. plants
- C. fungi
- D. all of the above

13. Which of the following is NOT a characteristic of ALL cells?

- A. cell membrane
- B. circular DNA
- C. organelles & cytoplasm
- D. genetic material