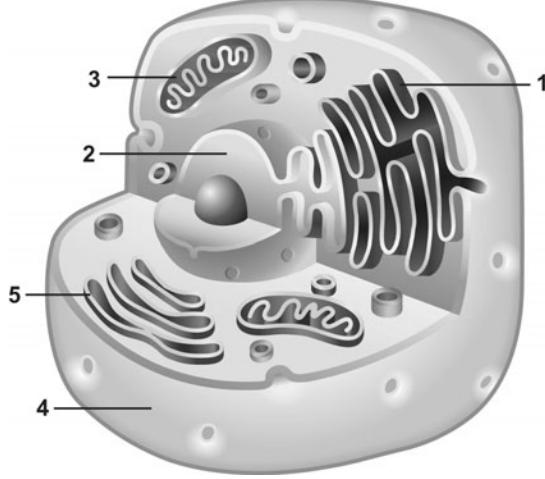


Pretest: Structure and Function of DNA

Read each question. Circle the letter of the correct answer.

1. Which of these is what DNA and RNA are?
 - A. lipids
 - B. proteins
 - C. nucleic acids
 - D. carbohydrates
2. Where are long chains of amino acids found?
 - A. lipids
 - B. sugars
 - C. proteins
 - D. carbohydrates
3. In eukaryotic cells, where is DNA found?
 - A. structure 1
 - B. structure 2
 - C. structure 3
 - D. structure 5
4. What gives each amino acid its unique properties?
 - A. its sequence
 - B. its side group
 - C. its amino group
 - D. its carboxyl group
5. What are the two types of nucleic acids?
 - A. nucleotides and ATP
 - B. DNA and ATP
 - C. RNA and ATP
 - D. DNA and RNA
6. What is removing materials from a cell in vesicles called?
 - A. osmosis
 - B. diffusion
 - C. endocytosis
 - D. exocytosis
7. Which of these defines a gene?
 - A. inherited trait
 - B. basic unit of life
 - C. segment of DNA
 - D. slice of a specimen
8. What can produce two identical DNA molecules?
 - A. translation
 - B. transcription
 - C. DNA replication
 - D. genes crossing over
9. What is the process that makes an exact copy of a cell's DNA called?
 - A. synthesis
 - B. preservation
 - C. conservation
 - D. replication

- 10.** What is DNA within each human body cell organized into?
- A.** 23 pairs of autosomes
 - B.** 23 pairs of chromosomes
 - C.** a total of 23 chromosomes
 - D.** 23 pairs of sex chromosomes
- 11.** Which of these is all the genetic material contained in an individual or a species?
- A.** genome
 - B.** genetic code
 - C.** epidemiology
 - D.** DNA fingerprint
- 12.** What is the genetic material that provides instructions for making proteins?
- A.** DNA
 - B.** cytosol
 - C.** ribosome
 - D.** cytoplasm
- 13.** Where are proteins made in a cell?
- A.** nucleus
 - B.** ribosomes
 - C.** mitochondria
 - D.** cell membrane
- 14.** What is the main function of the Golgi apparatus?
- A.** to copy genetic material
 - B.** to process and deliver proteins
 - C.** to communicate with other cells
 - D.** to convert solar energy to chemical energy
- 15.** Which of these is why DNA is contained in a different way in prokaryotic cells than it is in eukaryotic cells?
- A.** Prokaryotic cells lack a nucleus.
 - B.** DNA is found only in eukaryotic cells.
 - C.** Prokaryotes are single-celled organisms.
 - D.** Only eukaryotic cells have a cell membrane.