

Quiz: DNA and Its Functions

Part I: Multiple Choice

Directions: Circle the best answer for each question.

1. What does DNA stand for?

- A. Dynamic Nucleic Acid
- B. Deoxyribonucleic Acid
- C. Double Nucleus Acid
- D. Deoxyribose Nuclear Acid

2. What is the main function of DNA?

- A. To produce energy for the cell
- B. To protect the cell membrane
- C. To store and transmit genetic information
- D. To remove waste from the cell

3. Where is DNA found in most cells?

- A. Cell membrane
- B. Cytoplasm
- C. Nucleus
- D. Ribosome

4. DNA contains instructions for making:

- A. Water
- B. Proteins
- C. Oxygen
- D. Minerals

5. What are segments of DNA called?

- A. Cells
- B. Chromosomes
- C. Genes
- D. Organelles

6. Which structure contains DNA?

- A. Chromosome
- B. Cell wall
- C. Vacuole
- D. Cytoplasm

7. DNA helps determine an organism's:

- A. Inherited traits
- B. Habitat only
- C. Food supply only
- D. Age only

8. Which of the following is passed from parents to offspring through DNA?

- A. Traits
- B. Homework
- C. Memories
- D. Learned skills

9. What is a mutation?

- A. A type of protein
- B. A change in DNA
- C. A cell organelle
- D. A chromosome pair

10. Why is DNA important to living organisms?

- A. It controls and directs cell activities.
 - B. It produces sunlight.
 - C. It replaces oxygen.
 - D. It destroys proteins.
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Part II: True or False

Directions: Write **T** for True or **F** for False.

- 11. _____ DNA carries genetic information.
 - 12. _____ Genes are made of DNA.
 - 13. _____ DNA is found in the nucleus of most cells.
 - 14. _____ DNA has no role in inheritance.
 - 15. _____ Proteins are built using instructions found in DNA.
 - 16. _____ Chromosomes contain DNA.
 - 17. _____ Traits can be inherited from parents.
 - 18. _____ A mutation is a change in DNA.
 - 19. _____ DNA helps determine characteristics such as eye color and hair color.
 - 20. _____ Every living organism contains DNA.
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