

Fundamentals of Genetics

Genetics · Answer Key · 10 Questions

1. What molecule carries the genetic instructions for all living things?

- A) DNA**
- B) Protein
- C) Glucose
- D) Lipid

2. What is the shape of a DNA molecule?

- A) Square
- B) Double helix**
- C) Triangle
- D) Sphere

3. Where is the DNA primarily located inside a human cell?

- A) Ribosome
- B) Cytoplasm
- C) Nucleus**
- D) Cell wall

4. How many pairs of chromosomes do humans typically have in each cell?

- A) 12
- B) 23**
- C) 46
- D) 50

5. Which scientist is known as the father of genetics for his experiments with pea plants?

- A) Charles Darwin
- B) Gregor Mendel**
- C) Isaac Newton
- D) Albert Einstein

6. What is the term for a specific segment of DNA that codes for a trait?

- A) Gene**
- B) Enzyme
- C) Atom
- D) Cell

7. Which of these is a physical characteristic determined by genetics?

- A) Favorite food
- B) Eye color**
- C) Language spoken
- D) Education level

8. What are the four bases that make up the DNA code?

- A) A, B, C, D
- B) A, T, C, G**
- C) X, Y, Z, W
- D) P, Q, R, S

9. What gender chromosome combination is typically found in biological human males?

- A) XX
- B) XY**
- C) YY
- D) XO

10. What is the process called where an organism copies its DNA to make an identical cell?

- A) Replication**
- B) Digestion
- C) Photosynthesis
- D) Respiration