

Quiz: Inheritance & Variations of Traits

Part I: Matching

Directions: Match the term in Column A with the correct definition in Column B. Write the correct letter on the line.

Column A

1. Trait
2. Gene
3. Allele
4. Inheritance
5. Variation
6. Dominant Trait
7. Recessive Trait
8. Chromosome
9. Heredity
10. DNA

Column B

- A. Different forms of the same gene
- B. A characteristic passed from parent to offspring
- C. The passing of traits from parents to offspring
- D. A segment of DNA that determines a trait
- E. Differences in traits among individuals
- F. Trait that is expressed only when two recessive alleles are present
- G. Trait that masks another trait when present
- H. Structure that carries genetic information
- I. The transmission of genetic characteristics from parents to offspring
- J. Molecule that contains genetic instructions

Part II: Multiple Choice: Directions: Circle the best answer.

11. What is a trait?
 - a. A type of cell
 - b. A characteristic of an organism
 - c. A chromosome
 - d. A protein
12. Which structure contains genes?
 - a. Ribosome
 - b. Chromosome
 - c. Cell membrane
 - d. Cytoplasm
13. What is heredity?
 - a. The study of rocks
 - b. The passing of traits from parents to offspring
 - c. A type of mutation
 - d. Cell division

14. Which molecule carries genetic information?
 - a. Water
 - b. Protein
 - c. DNA
 - d. Glucose
 15. What causes variation among individuals?
 - a. Differences in genes and environment
 - b. Identical DNA in all organisms
 - c. Lack of chromosomes
 - d. Cell size
 16. An allele is:
 - a. A type of cell
 - b. A form of a gene
 - c. A chromosome
 - d. A protein
 17. Which trait is expressed when at least one dominant allele is present?
 - a. Recessive trait
 - b. Inherited trait
 - c. Dominant trait
 - d. Environmental trait
 18. Why might siblings have different traits?
 - a. They inherit different combinations of alleles
 - b. They have different species of DNA
 - c. They do not inherit genes
 - d. They lack chromosomes
 19. Which of the following is an example of an inherited trait?
 - a. A scar
 - b. Hair color
 - c. A sunburn
 - d. A learned skill
 20. Variation within a population is important because it:
 - a. Prevents inheritance
 - b. Helps populations adapt to changing environments
 - c. Eliminates genes
 - d. Stops evolution
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