

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