

Module 09 Quiz: Inheritance

Name: _____ Date: _____

Part A: Multiple Choice (7 points)

Choose the best answer for each question. (1 point each)

1. An organism with two different alleles for a trait is:
 2. A) Homozygous
 3. B) Heterozygous
 4. C) Dominant
 5. D) Recessive
6. The physical appearance of an organism is its:
 7. A) Genotype
 8. B) Phenotype
 9. C) Allele
 10. D) Chromosome
11. In a cross between two heterozygous individuals ($Aa \times Aa$), what fraction of offspring will show the recessive phenotype?
 12. A) $1/4$
 13. B) $1/2$
 14. C) $3/4$
 15. D) All
16. A cross between a red flower (RR) and white flower (WW) produces all pink offspring. This is an example of:

- 17. A) Complete dominance
 - 18. B) Incomplete dominance
 - 19. C) Codominance
 - 20. D) Polygenic inheritance
 - 21. A trait that appears more commonly in males is likely:
 - 22. A) Autosomal dominant
 - 23. B) Autosomal recessive
 - 24. C) X-linked recessive
 - 25. D) Y-linked
 - 26. Blood type AB demonstrates:
 - 27. A) Complete dominance
 - 28. B) Incomplete dominance
 - 29. C) Codominance
 - 30. D) Simple dominance
 - 31. In a pedigree, a filled-in circle represents:
 - 32. A) An affected male
 - 33. B) An affected female
 - 34. C) A carrier
 - 35. D) An unaffected individual
-

Part B: Free Response (3 points)

Answer each question in complete sentences.

- 1. (1 point) If a father is homozygous dominant (BB) and a mother is homozygous recessive (bb), predict the genotype and phenotype of their offspring.
-
-

1. (1 point) Explain why color blindness is more common in males than females.

1. (1 point) Distinguish between genotype and phenotype using a specific example.
