

Non-Mendelian Inheritance

Read Chapter 6.4

Fill in the Blanks

1. When a phenotype shows continuous variation in a population, it is known as _____.
2. Three examples of polygenic traits are:
 - a. _____
 - b. _____
 - c. _____
3. Match the word to the correct definition.

Pleiotropic, Epistasis, Polygenic, Codominance, Incomplete dominance

- a. A phenotype that is determined by multiple genes is called _____
 - b. When there are multiple phenotypes for one genotype, this is called _____
 - c. When a heterozygote has an intermediate phenotype, this is called _____
 - d. When the heterozygote expresses both alleles _____
 - e. When a trait is modified by other genes _____
4. If a bird's feather colour is incompletely dominant, and one allele causes red feathers and another allele causes blue feathers, a heterozygote's phenotype will be _____
 5. If two heterozygotes from the previous question mate, _____% of their offspring will be blue.
 6. Having blood type AB is an example of _____.
 7. If mom has blood type A and dad has blood type O, the baby will be either _____ or _____.
 8. If mom has blood type O and the baby is blood type B, Peter is blood type B and Paul is blood type AB. Can you determine who the father is (yes/ no)? _____
 9. Hydrangea flowers turn pink if the soil is _____ or blue if the soil is _____.
 10. What are 2 examples of traits that are influenced by environmental factors?
 - a. _____
 - b. _____
 11. Colour blindness in humans is X-linked. If dad is colour blind and mom is a carrier, the probability that they will have a child that is colour blind is _____%.
 12. A male fruit fly has white eyes and a female fruit fly is homozygous for red eyes. The probability they can have babies with white eyes is _____%
 13. Calico cats can only be female (True/ False) _____.