

1. How is a dominant allele represented? A recessive allele?
2. Explain the difference between heterozygous and homozygous?
3. What trait will be observed if the alleles are heterozygous?
4. Type II: Compare and contrast genotype and phenotype in a minimum of 5 lines. Be sure to use an example and the words allele and expression.
5. What happens according to Mendel's law of segregation?
6. What are heterozygous organisms called?
7. What is a monohybrid cross?
8. During a monohybrid cross, which allele is written first?
9. What is the genotypic ratio of Mendel's F1 cross? Phenotypic ratio?
10. What did Mendel begin to examine after he established inheritance patterns of a single trait?
11. When the F1 generations are heterozygous for two traits, what is it called?
12. Describe the law of independent assortment?
13. What happens to genes on separate chromosomes during meiosis?
14. In Mendel's Dihybrid cross, how many different genotypes were there? How many different phenotypes?
15. Why are Punnett Squares used in genetics?
16. Type II: Describe the set-up of a monohybrid cross in a minimum of 5 lines.
17. How is the Punnett Square different for a Dihybrid cross compared to a monohybrid cross?
18. Does the actual data match the predicted ratios of crosses? What happens when a larger number of offspring is involved in a cross?