



## Vocabulary: Hardy-Weinberg Equilibrium



### Vocabulary

- Allele – one of two or more forms that a gene could take.
- Genotype – the genetic makeup of an organism.
  - The alleles possessed by an organism are represented by symbols. For example, a parrot with dark green feathers might have the genotype *DD*.
- Hardy-Weinberg equation – equation that describes the relative frequency of genotypes in a stable population given the proportions of alleles.
- Hardy-Weinberg principle – principle stating that the proportions of different alleles and genotypes in a population will remain stable as long as certain conditions are met.
  - The Hardy-Weinberg principle applies to large populations in which mating is random, there is no migration, no mutations are occurring, and natural selection is not occurring for the alleles in question.
- Heterozygous – having two alleles that are different.
- Homozygous – having two alleles that are the same.
- Incompletely dominant – a pattern of inheritance in which the recessive allele is not completely masked by the dominant allele.
  - If the alleles are incompletely dominant, a heterozygote will have a phenotype that is intermediate between the phenotypes of the homozygotes.
- Punnett square – a diagram that shows the possible offspring of two parents.
  - Punnett squares allow you to determine the probability of each offspring genotype.

