

Vocabulary: Mouse Genetics (Two Traits)



Vocabulary

- Allele – one of two or more forms that a gene could take.
 - *Dominant alleles* are always expressed in the organism when they are present.
 - *Recessive alleles* are only expressed when the dominant allele is not present.
 - Usually dominant alleles are represented by capital letters. Recessive alleles are represented by lowercase letters.
- Genotype – the genetic makeup of an organism.
 - The alleles possessed by an organism are represented by symbols. For example, a mouse with white fur might have the genotype *ff*.
- Phenotype – the physical appearance of an organism.
 - Organisms with different genotypes can have the same phenotype. For example, an *FF* mouse and an *Ff* mouse both have black fur.
- Probability – the likelihood of an event.
 - Probability can be expressed as a fraction, decimal, or percentage. If the odds of an event are one in four, the probability is $1/4$, 0.25, or 25%.
- Punnett square – a diagram that shows the possible offspring of two parents.
 - Punnett squares allow for the determination of the probability of each offspring's genotype.