

Genetics

- Gene – segment of DNA that codes for a specific trait
- Allele – alternative forms of a gene
- Dominant – allele that masks other from being expressed (will show if present)
- Recessive – allele that is masked when dominant is present (show only if other is not present)
- Genotype – the alleles an organism possesses
- Phenotype – an organism's physical appearance
- Homozygous – both alleles are the same Ex. YY or GG
- Heterozygous – alleles are different Ex. YG
- Principle of Segregation – genes separate during meiosis
- Independent Assortment – genes for different characteristics are distributed to gametes independently
- Test Cross – unknown genotype is crossed with a homozygous recessive to figure out its genotype
- Sex Linkage – trait determined by alleles on the sex chromosomes
- Incomplete Dominance - two or more alleles influence phenotype
- Co-Dominance – Both alleles are expressed equally
- Multiple Alleles – traits that have multiple alleles
Ex. Blood type I^A , I^B , i
- Polygenic traits – two or more genes for one trait.