

# Unit 6 Vocabulary

Trait	An inherited characteristic.
Gene	An important segment of DNA that codes for a trait.
Chromosome	Structure made of tightly wound DNA.
Allele	Different form of a gene for a particular trait.
Dominant	The trait that is expressed if it is present, denoted with a capital letter.
Recessive	Trait that is only expressed when the dominant trait is not present, denoted with a lower case letter.
Genotype	The actual combination of alleles for a trait
Homozygous	When there are two of the same alleles for a trait, AA or aa
Heterozygous	When there are two different alleles for a trait, Aa
Complete Dominance	Type of dominance in which the heterozygote expresses the dominant trait.
Incomplete Dominance	Type of dominance in which the heterozygote expresses a blend of the dominant and recessive trait.
Codominance	Type of dominance in which the heterozygote expresses both the dominant and recessive trait.
Crossing over	The swapping of genes among homologous chromosomes during meiosis.
Nondisjunction	Failure of homologous chromosomes to separate properly during meiosis, results in gametes with too many or too few chromosomes.
Autosomes	First 22 pairs of human chromosomes that determine characteristics other than gender of an organism.
Sex chromosomes	Chromosomes that determines the gender of an individual, the 23 <sup>rd</sup> pair of chromosomes in humans.
Karyotype	A picture of homologous chromosome pairs, used to do chromosomal studies of organisms.
Polygenic inheritance	When traits are controlled by more than one gene and produce a wide variety of phenotypic outcomes
Multiple Alleles	A gene that has more than one allele.
Sex Linked Trait	A trait controlled by a gene located on the sex chromosome.
Pedigree	A family tree that shows which members inherit a specific trait over several generations.
Law of Segregation	States that the members of a pair of homologous chromosomes separate during meiosis and are distributed to different gametes.
Law of Independent Assortment	When gametes are made, the genes for traits found on different chromosomes separate independently of each other.
Gene Therapy	Insertion of genes into an organism's cells in an attempt to replace defective genes.

