Must-Know Terms in Genetics

[Gene](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossG.html#genes) - a unit of inheritance that determines a physical trait.

[Allele](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossA.html#alleles) - an alternate form of a gene. Usually there are two alleles for every gene, but sometimes there are more.

[Homozygous](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossH.html#homozygous) - when the two alleles are the same.

[Heterozygous](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossH.html#heterozygous) - when the two alleles are different, in such cases the dominant allele is expressed.

[Dominant](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossD.html#dominant) - a term applied to the trait that is fully expressed.

[Recessive](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossR.html#recessive) - a term applied to the trait that is only expressed when both alleles are the same. Recessive alleles are generally due to a gene mutation causing a loss of function.

[Genotype](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossG.html#genotype) - the set of alleles for an individual organism. An individual has two alleles for each gene.

[Phenotype](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookglossPQ.html#phenotype) - Traits that result from the genotype.

[Punnett squares](http://www.emc.maricopa.edu/faculty/farabee/BIOBK/#Punnett squares) - probability diagram illustrating the possible offspring of a mating.