**Unit 7 Heredity and Genetics Vocabulary**

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| **Genetics** | The study of heredity |
| **Traits** | A characteristic that an organism can pass on to its offspring through its genes. |
| **Gene**Image result for gene | A segment of DNA on a chromosome that codes for a specific trait |
| **Dominant trait**T  | the trait observed when at least one dominant allele for a characteristic is inherited – ex CAPITAL LETTER |
| **Recessive trait**t  | a trait that is apparent only when two recessive alleles for the same characteristic are inherited –ex. Lower case letter |
| **Mendel** | The father of genetics, Augustinian monk and botanist who experimented with the breeding of garden peas. |
| **Homozygous (pure)****TT** | Having two identical alleles for a trait |
| **Heterozygous (hybrid)****Tt** | Having two different alleles for a trait |
| **Incomplete Dominance**Related image | occurs when neither allele is dominant over the other and the phenotype of the offspring is a blend of the dominant and recessive trait EX: pink |
| **DNA**C:\Users\Carissa\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\1Z1SRP6E\MC900436816[1].wmf | A molecule containing the genetic information that makes up the chromosomes. Double Helix shape |
| **Punnett Square**http://t2.gstatic.com/images?q=tbn:ANd9GcSAUvZHG6TzbXeKSX-xuyteicomg7yVx8vQ47rMHeW8UuVrYC1euHdwWw | A diagram for predicting the alleles of offspring from a cross between individuals of known genetic makeup. |
| **Genotype** | An organism’s genetic makeup, or allele combinations. |
| **Phenotype** | An organism’s physical appearance, or visible traits. |
| **Sickle Cell Anemia****http://t1.gstatic.com/images?q=tbn:ANd9GcTp_QcHka0dFj7qeVwc71mPgK9nG_aViCjFkD2IoVilGrEcXVgioAXfRbo** | Condition where red blood cells assume an abnormal sickle shape |
| **Pedigree Chart**http://t3.gstatic.com/images?q=tbn:ANd9GcR7RSXqagRmO7O2hbFCkGNeMJcGw1joHbazvUsHi94HLGf8SVM6XQTortU | traces the inheritance of a particular trait through several generations |
| **Genetic counseling** | guidance for prospective parents on the likelihood of genetic disorders in their future children |
| **Chromosome****C:\Users\Carissa\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\1Z1SRP6E\MC900436816[1].wmfhttp://t1.gstatic.com/images?q=tbn:ANd9GcSjmZEN3K3ETIeiKM7YSDaIE8FuY4ivSyd4IScIxdeob3wRw2is2kCdjxQ** | A coiled structure in the nucleus that contains hereditary material. Genes are a specific location on this structure. |
| **Alleles**Image result for allele | Different versions of the same gene |