

# Chapter 11

## Vocabulary Words

# Vocab - Day 1

- \* **Allele** - The different form of a trait that a gene may have.
- \* **Dominant** - This describes a trait that covers over, or dominates, another form of that trait.
- \* **Genetic Engineering** - Biological and chemical methods to change the arrangement of a gene's DNA to improve crop production, produce large volumes of medicine, and change how cells perform their normal functions.
- \* **Genetics** - The study of how traits are inherited through the actions of alleles.
- \* **Genotype** - An organism's genetic makeup.

# Vocab - Day 2

- \* **Heredity** - The passing of traits from parent to offspring.
- \* **Heterozygous** - The description of an organism with two different alleles for a trait.
- \* **Homozygous** - An organism with two alleles that are the same for a trait.
- \* **Hybrid** - An offspring that was given different genetic information for a trait from each parent.
- \* **Incomplete Dominance** - The production of a phenotype that is intermediate between the two homozygous parents.



# Vocab - Day 3

- \* **Phenotype** - The way an organism looks and behaves as a result of its genotype.
- \* **Polygenic Inheritance** - This occurs when a group of gene pairs acts together and produces a specific trait, such as human eye color, skin color, or height.
- \* **Punnett Square** - A tool to predict the probability of certain traits in offspring that shows the different ways alleles can combine.
- \* **Recessive** - A trait that is covered over, or dominated, by another form of that trait and seems to disappear.
- \* **Sex-linked Gene** - An allele inherited on a sex chromosome and that can cause human genetic disorders such as color blindness and hemophilia.
- \* **Mutation** - Any permanent change in a gene or chromosome of a cell.

# Vocab - Day 4

- \* **Meiosis** - The reproductive process that produces four haploid sex cells from one diploid cell and ensures offspring will have the same number of chromosomes as the parent organism.
- \* **Mitosis** - A cell process in which the nucleus divides to form two nuclei identical to each other, and identical to the original nucleus, in a series of steps. (interphase, prophase, metaphase, anaphase, & telophase)
- \* **DNA**- The genetic material of all organisms, made up of two twisted strands of sugar-phosphate molecules and nitrogen bases.
- \* **Chromosome** - A structure in the cell's nucleus that contains hereditary material.
- \* **Trait** - The characteristics you display.
- \* **Zygote** - A new diploid cell formed when a sperm fertilizes an egg; will divide by mitosis and develop into a new organism.