**Genetics & Heredity Vocab**

1. **DNA:** a molecule that is present in all living cells and that contains the information that determines the traits a living thing inherits and needs to live.
2. **Mutation:** changes in the DNA that may be helpful or harmful to the organism or have no effect at all.
3. **Heredity:** the passing of genetic material (DNA) from parent to offspring
4. **Selective Breeding/Artificial Selection:** the human practice of breeding animals or plants that have certain desired traits.
5. **Genetics:** the scientific study of heredity
6. **Sex-Linked Gene:** a trait inherited on the 23rd pair of chromosomes
7. **Trait:** a characteristic of an organism
8. **Chromosomes:** strands of DNA
9. **Gene:** one set of instructions for an inherited trait; a section of a chromosome
10. **Genotype:** the exact make-up of a gene shown with letters
11. **Phenotype:** the results of a gene; the appearance of a trait
12. **Allele:** the different forms of a gene that control traits
13. **Dominant Allele:** the allele that is fully expressed whenever it is present in an individual
14. **Recessive Allele:** the allele that is masked or hidden unless an individual is homozygous for the trait
15. **Heterozygous:** two different alleles on a gene represented with one capital letter and one lower case letter
16. **Homozygous:** two of the same alleles on a gene represented with either two capital letters or two lower case letters
17. **Incomplete Dominance:** neither allele is stronger and the offspring appears to have a mixture of alleles
18. **Co-Dominance:** both alleles are expressed in the offspring