**Vocabulary:** **Chicken Genetics**



**Vocabulary**

* Allele – one of two or more forms that a gene could take.

* Codominance – a pattern of inheritance in which the phenotypes of both alleles inherited for a trait are clearly expressed.
	+ In humans, the A and B alleles for blood type are codominant. If a person inherits both alleles, they will have type AB blood.
* Dominant – describes an allele that is always expressed when it is present.
	+ Dominant alleles are usually represented by capital letters, such as *F*.
* Genotype – the genetic makeup of an organism.
	+ The genotype an organism is represented by symbols. For example, a chicken with with white feathers might have the genotype *FWFW*.
* Heterozygous – having two alleles that are different.
* Homozygous – having two alleles that are the same.
* Phenotype – the physical appearance of an organism.
	+ With dominant/recessive inheritance patterns, organisms with different genotypes may have different phenotypes. However, with codominant inheritance patterns, organisms with different genotypes will always have different phenotypes.
* Probability – the likelihood that a specific event will occur.
	+ Probability is calculated by dividing the number of one kind of possible outcome by the total number of all possible outcomes.
	+ Probability can be expressed as words, fractions, decimals, or percentages. For example, an event that will likely happen one out of every four times has a probability of ¼, 0.25, and 25%.
* Punnett square – a diagram that shows the possible offspring of two parents.
	+ Punnett squares can be used to determine the probability of each offspring’s genotype.
* Recessive – describes an allele that is not expressed when the dominant allele is present.
	+ Recessive alleles are usually represented by lowercase letters, such as *f*.
* Trial – a single time an experiment is conducted.