Animal Science Genetics Vocabulary / Study Guide

What are three differences between RNA and DNA

Be able to explain the relationships between; Codons, Anticodons and Amino Acids, Polypeptide, Protein, tRNA, mRNA, Nucleotide and Ribosomes.

What is the relationship between the following words; sex cell, zygote, sperm cell, ovum and gamete

What are the three components of a nucleotide?

What are the four nucleotides found in DNA?

What is the one unique nucleotide found only in RNA?

Be able to examine a pedigree and determine the inheritance pattern of the trait.

What is the corresponding RNA strand for the following strand of DNA A T C G C A G G C A T T

How many nucleotides are in a codon? What is the function of a codon?

What are the complimentary base pairs of nucleotides?

What scientist(s) is credited for the current model of DNA?

How may chromosomes do you have? How many does a chicken have? (E-unit)

How is spermatogenesis different than oogenesis?

Allele

Gene

Chromosome

Autosome

Co-dominant

Dominant

Recessive

Genetic Mutation

Genetic Variation

Genotype

Phenotype

Heterozygous

Homozygous

Meiosis

Punnett Square

Protein Synthesis

DNA Replication

Transcription

Translation

Law of Segregation

Independent Assortment

Multiple Allele – Epistasis – Polygenic Trait

Incomplete Dominance

X-linked

Sex Cell

mRNA

tRNA

Polypeptide

Nucleotide

Protein

Pedigree

Affected

Unaffected

Carrier

Dihybrid

Monohybrid

Zygote

Gamete

DNA

RNA

Gene linkage

Karyotype

Haploid

Diploid

Heridity

Tetrad

Crossing Over

Sex Chromosomes Male \_\_\_\_ Female \_\_\_\_

Homologous Chromosomes

Qualitative trait

Quantitative Trait