**DNA Vocabulary Words**

**Gene** – section of DNA that codes for a protein/trait

**Messenger RNA** – RNA that codes for amino acids that leaves the nucleus and is translated by the ribosomes (it contains codons)

**Chromatin** – DNA not wound tightly into a chromosome

**Ribosomal RNA** – RNA that makes up a portion of a ribosome

**DNA replication** – the making or synthesis of an exact duplication or copy of DNA

**Transfer RNA** – RNA that carries amino acids to the ribosomes. (contains the anticodon)

**DNA polymerase** – an enzyme that puts new nucleotides into place during DNA replication

T**ranscription** – making or synthesizing RNA from DNA (U’s replace T’s)

**RNA polymerase** – The enzyme that puts RNA nucleotides in place when making RNA (making RNA is called transcription)

**DNA Nucleotide** – the building blocks of DNA. Contains phosphate, deoxyribose sugar, and nitrogen base (A,T, C, or G)

**RNA Nucleotide** – the building blocks of RNA. Conatins phosphate, ribose sugar, and nitrogen base (A, U, C, or G)

**Translation** - the process of creating a chain of amino acids (protein) by reading codons of mRNA at the ribosomes.

 **base pairing** – the bonding of correct nitrogen bases together. A goes with T and C goes with G AND in RNA U pairs with A.

**Codon** - a code of 3 nucleotide bases on mRNA that tell which amino acid belongs next in the chain

**Mutation** – a mistake in the base pairing of DNA. (wrong pairing, missing a base, or adding extras)

**Anticodon**- contained on tRNA, it is a 3 base code that is opposite of a codon that allows the tRNA to get the correct amino acid and deliver to the correct codon.

**point mutation** – a mistake in DNA that is ONLY one base substituted for the ONE correct base.

**Frameshift mutation**- a mistake (deletion or insertion) that creates multiple mistakes throughout the DNA