

**Project 3.2.6 Supplement C:**

Biology Vocabulary

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| **Term** | **Definition** |
| **amino acid** | The building block of proteins. There are 20 distinct "standard" amino acids that make up proteins in living organisms, meaning that each of these 20 amino acids are encoded by DNA. |
| **complementary DNA** | In double-stranded DNA, the strands are complementary, pairing G-C and A-T. The nucleotides are read in opposite directions, so AAATGC is complementary to GCATTT. |
| **DNA** | Deoxyribonucleic acid is a long molecule created from a chain of DNA nucleotides (G, C, A, and T). |
| **mutation** | A mutation is a change in a DNA sequence. It can be caused by a chemical that damages the DNA, in which case the chemical is called a mutagen. A point mutation is a change in which a single nucleotide is changed to another nucleotide. Mutations also occur when nucleotides are inserted or deleted into a DNA sequence. |
| **nucleotide** | A nucleotide is a molecule of roughly 40 atoms that is the building block of either RNA or DNA, depending on whether an oxygen atom is present in a particular location in the chemical structure. The single "letters" in DNA or RNA each stand for a specific nucleotide: G (guanine), C (cytosine), A (adenine), T (thymine), and U (uracil). |
| **phylogenetic tree** | A diagram grouping organisms into families based upon genetic similarity. |
| **protein** | Large molecules that perform most actions in organisms, from digestion to muscle contraction, control of cell growth, and sensory perception. Proteins are made from one or more long chains of amino acids. |
| **RNA** | Ribonucleic acid is a long molecule containing a sequence of RNA nucleotides (G, C, A, and U). |
| **transcription** | DNA is transcribed to RNA in the nucleus. |
| **translation** | RNA is translated to protein outside the nucleus at the ribosomes. |