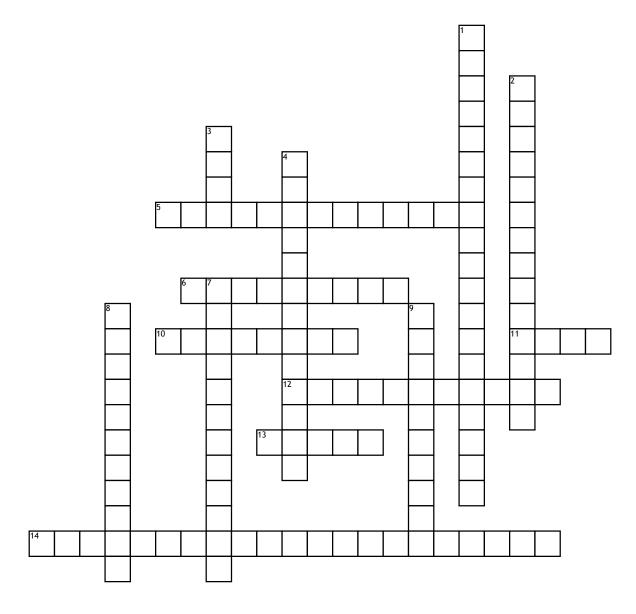
DNA and Protein Vocab



Across

- 5. States that in a molecule of DNA, the amount of adenine equals the amount of thymine and the amount of cytosine equals the amount of guanine. (A=T, C=G)
- **6.** A three letter sequence on a tRNA molecule that is a complement to the codon and helps the tRNA molecule to line up correctly with the mRNA
- **10.** A permanent change in the nucleotide sequence of DNA.
- 11. "transfer" RNA molecule that carries amino acids from the cytoplasm to the ribosome so they can be assembled into proteins
- 12. In the ribosome, the process by which the code on mRNA is used to assemble amino acids into proteins. mRNA \rightarrow protein

- **13.** A three letter sequence on an mRNA molecule that codes for a specific amino acid.
- 14. Describes the process by which a cell makes a copy of its' DNA in such a way that each new DNA molecule is made of one original strand and one new strand... ½ old and ½ new.

Down

- 1. Refers to the strand of DNA that is bonded to, or matches, the template strand of DNA
- **2.** The process by which a cell creates a copy of a DNA molecule. This process occurs in the nucleus of the cell during the S phase of interphase.
- **3.** "messenger" RNA molecule that carries the instructions from the DNA in the nucleus out to the ribosomes in the cytoplasm.

- 4. In the nucleus, the process by which a molecule of mRNA is made from DNA. DNA \rightarrow mRNA
- 7. The part of a nucleotide that is composed of rings of nitrogen. The possible bases are Adenine, Thymine, Cytosine, Guanine, and Uracil.
- **8.** The 3-D shape of DNA, looks like a twisted ladder in which the sides are made up of the sugar and phosphate parts of the nucleotide and the rungs are made up of the nitrogen bases bonded together.
- 9. The building blocks of the nucleic acids (DNA and RNA). Every nucleotide is made of a Sugar, a Phosphate, and a Nitrogen base (ESPN)