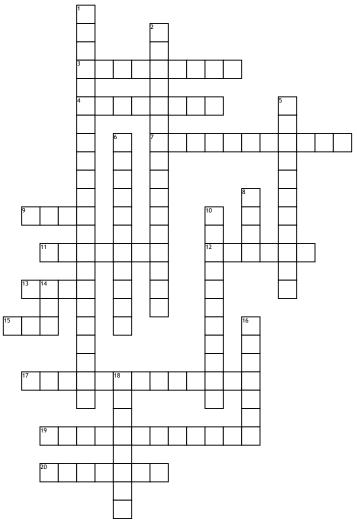
Genetics Crossword Puzzle



Across

- **3.** a simple organic compound containing both a carboxyl (–COOH) and an amino (–NH2) group.
- 4. any of a class of nitrogenous organic compounds that consist of large molecules composed of one or more long chains of amino acids
- 7. a complex organic substance present in living cells, especially DNA or RNA, whose molecules consist of many nucleotides linked in a long chain.
- **9.**) is a type of RNA molecule that helps decode a messenger RNA (mRNA) sequence into a protein
- **11.** a compound which is one of the four constituent bases of nucleic acids
- **12.** a compound found in living tissue as a constituent base of RNA

- **13.** a noncoding type of RNA that acts as the primary building block for ribosomes and the assembly line on which protein synthesis occurs
- 15. Deoxyribonucleic acid
- 17. the first of several steps of DNA based gene expression, in which a particular segment of DNA is copied into RNA by the enzyme RNA polymerase.
- **19.** a nitrogen-containing molecule that has the same chemical properties as a base
- **20.** a compound which is one of the four constituent bases of nucleic acids.

Down

- 1. an important stuctural component of DNA. It consists of 5-carbon deoxyribose sugars and phosphate groups.
- 2. the process in which cells make proteins.

- 5. the process in which ribosomes in the cytoplasm or ER synthesize proteins after the process of transcription of DNA to RNA in the cell's nucleus.
- **6.** two chemical bases bonded to one another forming a "rung of the DNA ladder."
- **8.** is a single-stranded RNA molecule that is complementary to one of the DNA strands of a gene
- **10.** the structure formed by double-stranded molecules of nucleic acids such as DNA
- 14. Ribonucleic acid
- **16.** a compound that occurs in guano and fish scales, and is one of the four constituent bases of nucleic
- **18.** a compound found in living tissue as a constituent base of nucleic acids

Word Bank

Amino Acid Translation **RNA** Sugar-Phosphate Backbone Adenine Cytosine Transcription tRNA rRNA **Proteins** Nitrogen Base Double-Helix DNA mRNA Thymine Nucleic Acid Guanine Uracil **Protein Synthesis Base-Pairing**