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DNA, RNA, and Protein Synthesis!

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| **Across**  **3.**  Mutation that involves the insertion or deletion of a nucleotide in the DNA sequence.  **6.** Gene mutation involving changes in one or a few nucleotides.  **7.** \_\_\_\_\_ is a nucleic acid messenger between DNA and ribosomes.  **12.** Two strands of nucleotides wound about each other; structure of DNA.  **13.** Process in which cells become specialized in structure and function.  **14.** One of the four nitrogen bases in DNA; pairs with Thymine in DNA and Uracil in RNA.  **16.** One of the four nitrogen bases in DNA; pairs with cytosine.  **19.** Process by which mRNA is decoded and a protein is produced.  **20.** A building block of DNA, consisting of a five-carbon sugar bonded to a nitrogenous base and a phosphate group. | **Down**  **1.** Each \_\_\_\_\_\_\_\_\_\_\_\_\_ is made up of DNA tightly coiled many times.  **2.** 1st process/step in protein synthesis; creates mRNA.  **4.** There are 4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_in DNA; Thymine, Adenine, Guanine, Cytosine.  **5.** A change in a gene or chromosome.  **8.** Copying process by which a cell duplicates its DNA.  **9.** One of the four nitrogen bases in DNA; pairs with guanine.  **10.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is the assembly of amino acids (by RNA) into proteins.  **11.** One of the four nitrogen bases in DNA; pairs with Adenine and is replaced by uracil in the molecule RNA.  **15.** Cells uniquely suited to perform a particular function; specific.  **17.** Control center of the cell that contains DNA.  **18.** \_\_\_\_\_\_\_\_is the molecule of heredity meaning it allows information to be passed from generation to generation. |