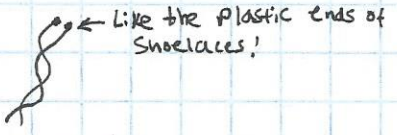
DNA Study Guide

VOCABULARY

* Transformation: Mutation
* Bacteriophage: A virus parasiting a bacterium (by infecting it and reproducing inside it).
* Base pairing: Pairing of Nitrogenous Bases (A~T, C~G).
* Replication: Copying of DNA Strands. ALWAYS one new strand, one original Strand.
* DNA polymerase: Enzymes that create DNA molecules by assembling nucleotides.
* Telomere: Affects how our cells age. Protects chromosomes. Located at the ends of DNA strands.



* Nucleotide: THE BUILDING BLOCKS OF DNA. Composed of phosphate group, Nitrogenous Base (only one), and sugar group. (3 parts).
* Deoxyribose: Monosaccharide, deoxy sugar (ribose w/ one oxygen atom removed).
* Adenine, Thymine, Cytosine, Guanine } Nitrogenous Bases used for DNA Code).

* Replication fork: Created by Helicase, which breaks the Hydrogen Bonds that Hold DNA Strands together.
  - Structure forms within nucleus during DNA replication.

* Nitrogen Bases: Simply a nitrogen containing molecule that has chemical properties of a base. Make up building Blocks of DNA / RNA.
* Covalent Bonds: Hold together Nucleotides. Sharing of electron pairs between atoms.
* Hydrogen Bonds: Hold together Entire Strands of DNA. Attraction between hydrogen attached to an electromagnetic Atom of one Molecule & an. electromagnetic atom of another.
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GUIDING QUESTIONS

1) What is the process of DNA replication?
   - double ~~strand~~ helix is unwound - each strand acts as a basis for the next strand.