Notes:
DNA Structure

Topics:

Nucleic acids (DNA and RNA) are the information molecules of living things.

DNA - Deoxyribonucleic acid, found in the nucleus of Eukaryotic cells and plasmids of prokaryotic cells.

RNA - Ribonucleic acid, found in the nucleus, cytoplasm and ribosomes.

Nucleotides are made of three parts:

1) A nitrogen base
2) A pentose sugar (deoxyribose sugar or ribose sugar)
3) Phosphoric Acid

DNA is a double helix or twisted ladder consisting of two polynucleotide strands paired together at the bases by hydrogen bonds.

Bases always pair up the same way, this is known as complementary base pairing.

Always:
- Adenine with Thymine
- Cytosine with Guanine

Assignment: On a blank piece of paper, make an accurate model of DNA. It must be a minimum of 6 base pairs long on each side.

This model is 3 base pairs on each side.

Readiness and accuracy are important because we will be using this model to replicate DNA.

DNA nucleotides are linked together by covalent bonds into a single strand.

The four nitrogen bases in DNA are:
- Adenine, Thymine, Cytosine and Guanine

Dr. and label a simple diagram of the molecular structure of DNA. (Minimum of 6 base pairs)

Hydrogen Bond