

DNA: Deoxyribonucleic Acid

- ❖ Double stranded
- ❖ Deoxyribose sugar
- ❖ Bases: Guanine, Cytosine, Adenine, Thymine
 - G - C
 - A - T
- ❖ DNA replicates and stores genetic information. It is a blueprint for all genetic information contained within an organism

RNA: Ribonucleic Acid

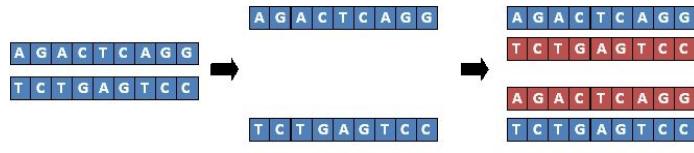
- ❖ Single stranded
- ❖ Ribose sugar
- ❖ Bases: Guanine, Cytosine, Adenine, Uracil
 - G - C
 - A - U
- ❖ RNA converts the genetic information contained within DNA to a format used to build proteins, and then moves it to ribosomal protein factories

DNA Replication

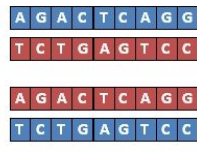
DNA replication is semiconservative. Each strand in the double helix acts as a template for synthesis of a new, complementary strand

DNA Transcription to RNA

Transcription is the process by which the information in a strand of DNA is copied into a new molecule of messenger RNA (mRNA)



Strands separate



A new strand is built for each, using the original strand as a template

