

# NUCLEIC ACIDS

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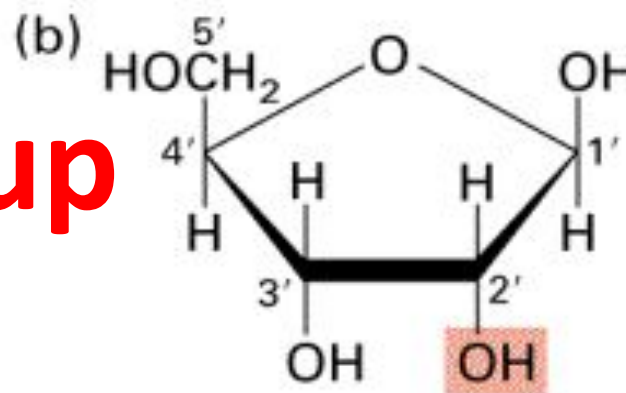
- Nucleic acids contain C, O, H, N, and P.
- They are master molecules of cell.
- Plays crucial role in *regulating cell activity*
- They are very *large polymers*, which consists of *monomers* called **nucleotide**.



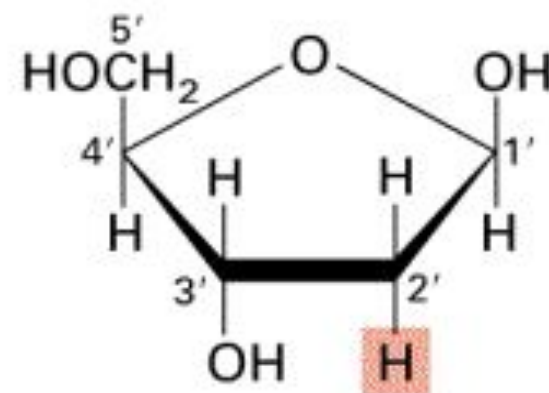
Phosphate group

## Structure of nucleotide

•1 Phosphate group



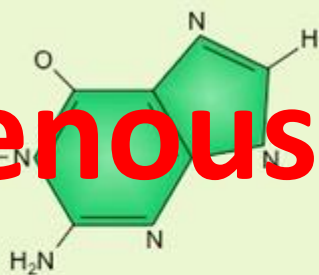
Ribose



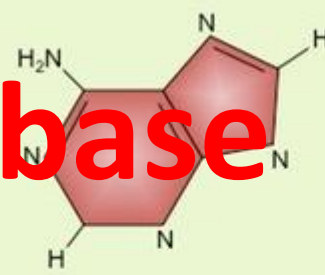
2-Deoxyribose

•2 Pentose sugar

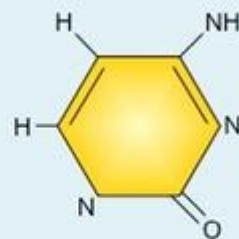
•3 Nitrogenous base



Guanine



Adenine



Cytosine



Thymine



Uracil

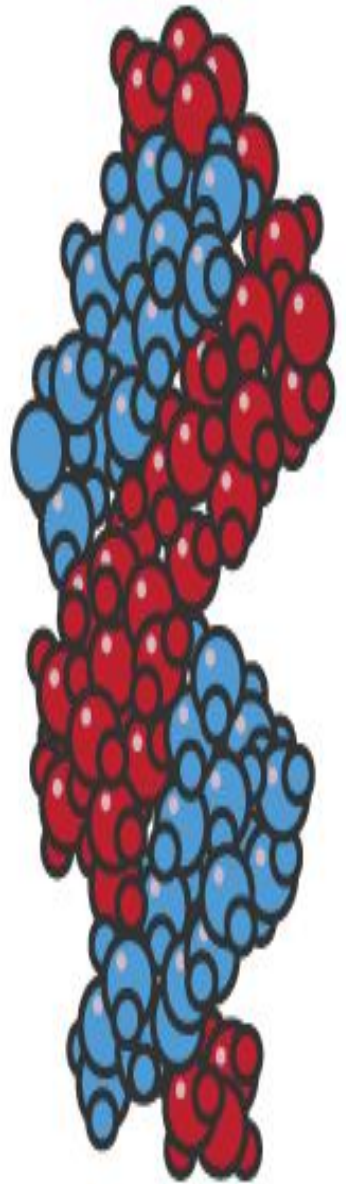
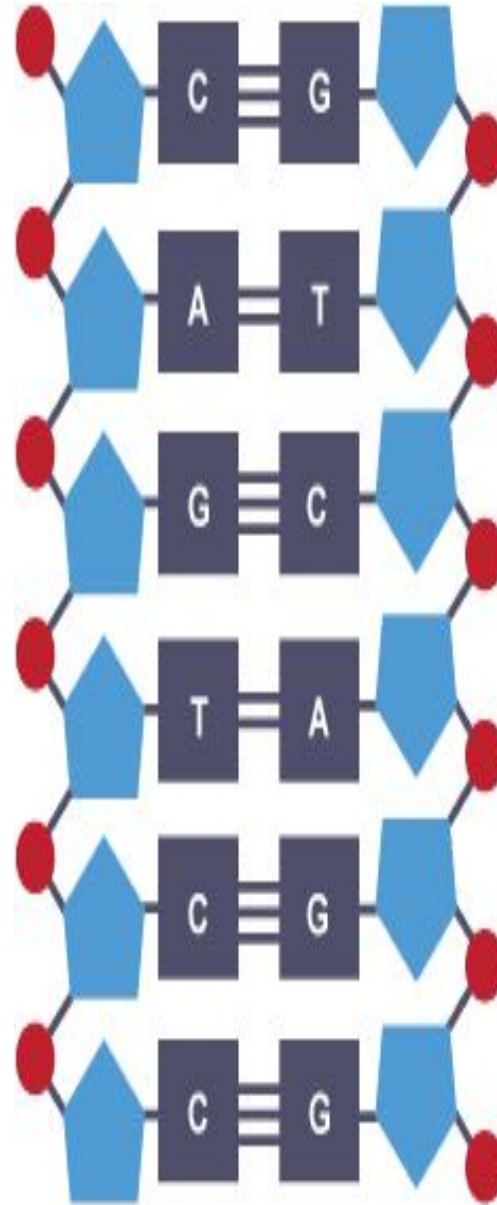
# TYPES OF NUCLEIC ACID



- DNA(Deoxyribosic NA)    RNA(Ribonucleic acid)
- *Double* helix                      *Single* stranded
- Nitrogenous bases:                      Nitrogenous bases:
- A, G, C and *THYMINE*                      A, G, C and *URACIL*

# DNA

- Storage genetic information
- Regulation of protein synthesis and RNA



# RNA

- *Synthesized* from DNA
- *Messenger* RNA(mRNA) - carries information from DNA to ribosome
- *Ribosomal* RNA(rRNA)- participates in the structure of ribosome
- *Transfer* RNA(tRNA)- brings needed amino acids to the ribosome

