

Backbone is provided by sugar and phosphates.  
Two poly nucleotide chains are held together by  
N-Bonds: Always purine base pair with pyrimidine  
Strands run anti parallel.

### Relevance of DNA structure:

- ① New realm of molecular biology
- ② Helps in understanding how genes operate, cell division
- ③ Biotechnology and gene engineering
- ④ Protein synthesis

DNA can be double stranded or single stranded

On the basis of nature of nucleotide sequence—

- ① Palindromic DNA
- ② Repetitive DNA or Satellite DNA (Absent in Prokaryotes)

## # DNA REPLICATION

Parental DNA synthesizing identical daughter duplexes