The structure of DNA

Physical properties of DNA	Chemical properties of DNA
Double-stranded helix	Four types of nucleotide bases: • A nucleotide contains adenine • T nucleotide contains thymine • G nucleotide contains guanine. • C nucleotide contains cytosine
Two polymers of nucleotide (polynucleotide) strands twisted into double helix	Adenine and guanine are the two purine bases, with a single ring structure. Cytosine and thymine are the two pyrimidine bases, which have the double-ring structure. a purine base will complementarily pair with the pyrimidine base
The strands of DNA run anti-parallel. one in 5'-3' and other in 3'-5' direction.. Each strand has a 5′end (with a phosphate group) and a 3′end (with a hydroxyl group).	A joins with T two hydrogen bonds G joins with C. three hydrogen bonds.
The diameter of the DNA is 20A/2nm	
The distance between the two nucleotides is 3.4 A.	
The length of DNA double helix is 34A. 10^8–10^9 nm	
Major groove and minor grooves are formed during coiling between the strands. This is caused by geometrical configuration of the bonds between the phosphate, sugar, and base groups that forces the base groups to attach at 120-degree angles instead of 180 degrees. The larger groove is called the major groove. This occurs when the backbones are far apart. The minor groove occurs when they are close together.	