

Figure 2.1 Prokaryotic cell and eukaryotic cell: Diagrammatic illustration.

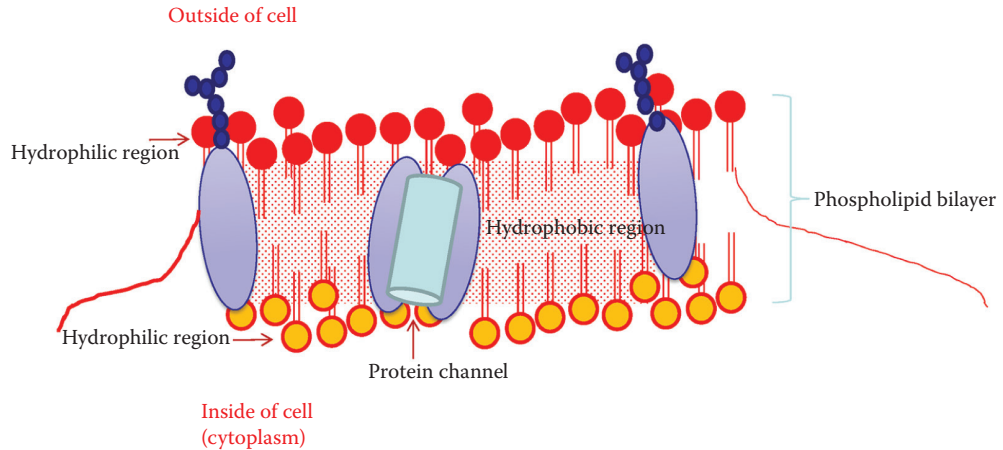


Figure 2.2 Cell membrane: Diagrammatic illustration.

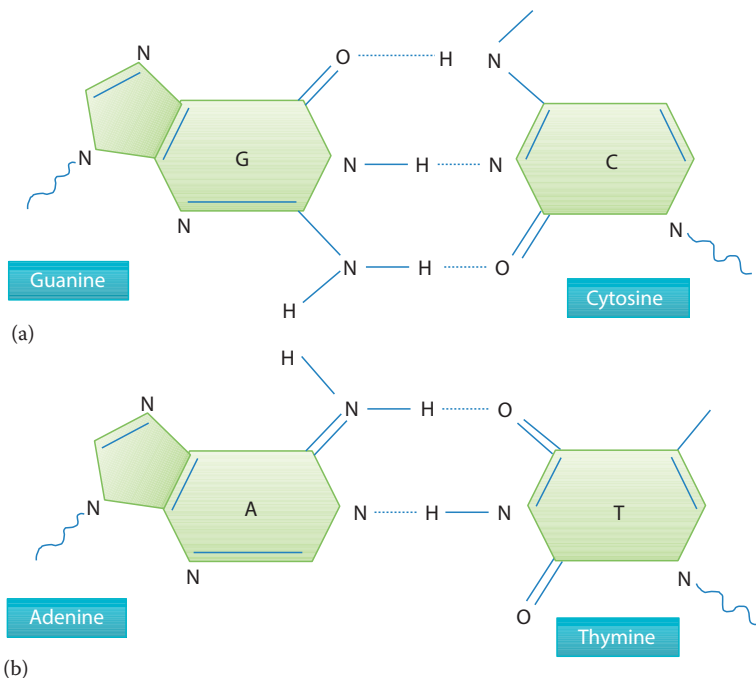


Figure 2.3 (a) A GC base pair with three hydrogen bonds. (b) An AT base pair with two hydrogen bonds. Non-covalent hydrogen bonds between the pairs are shown as dashed lines.

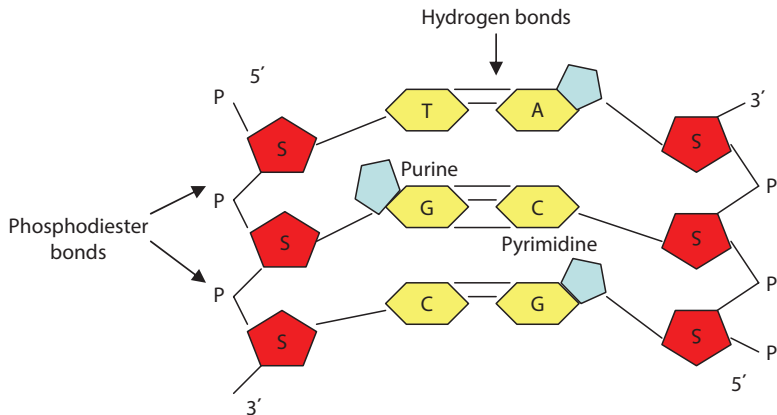


Figure 2.4 DNA base pairing.

Double helix of DNA

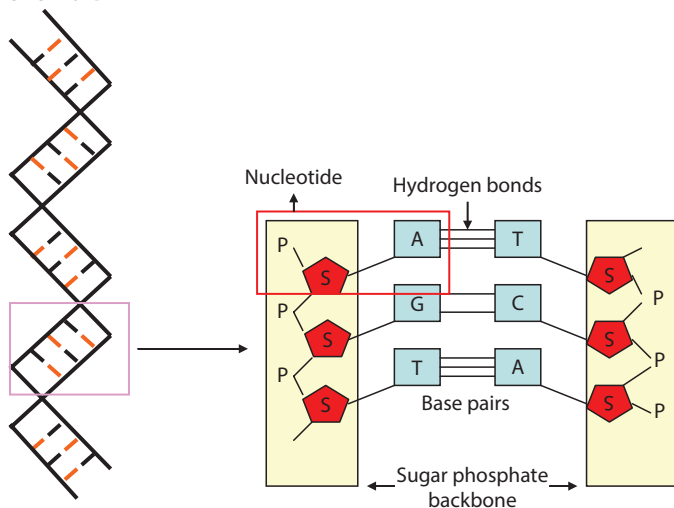


Figure 2.5 The structure of DNA: pieces of DNA are pairs of molecules, which entwine like vines to form a double helix. DNA strands are composed of four nucleotide subunits. These are adenine (A), thymine (T), cytosine (C), and guanine (G). Each base forms hydrogen bonds readily to only one other—A to T and C to G. The entire nucleotide sequence of each strand is complementary to that of the other.

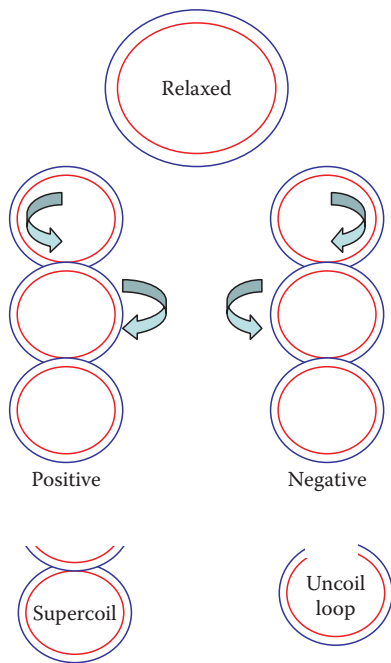


Figure 2.6 DNA supercoiling.

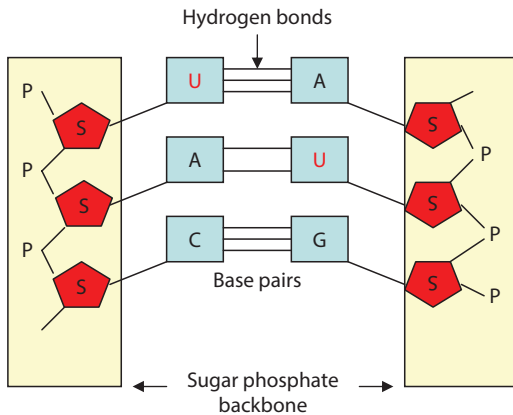


Figure 2.7 RNA structure.

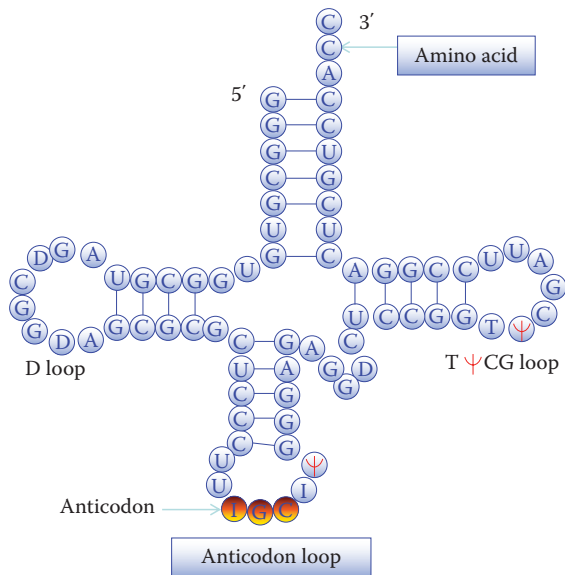


Figure 2.8 Transfer RNA (tRNA) structure.

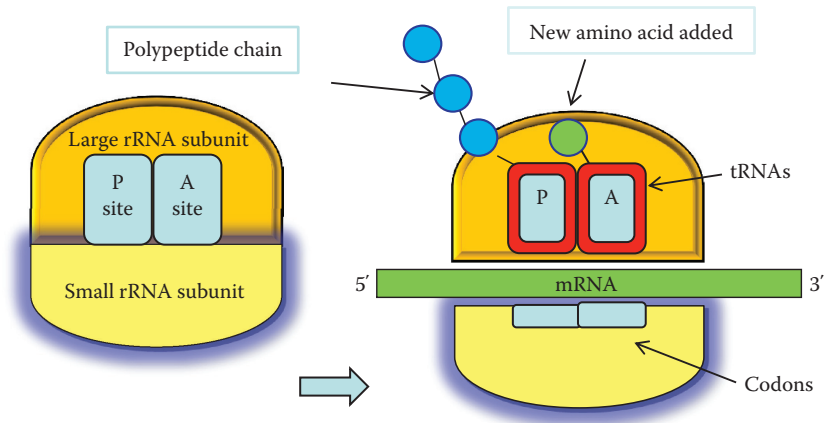


Figure 2.9 Ribosomal RNA (rRNA).

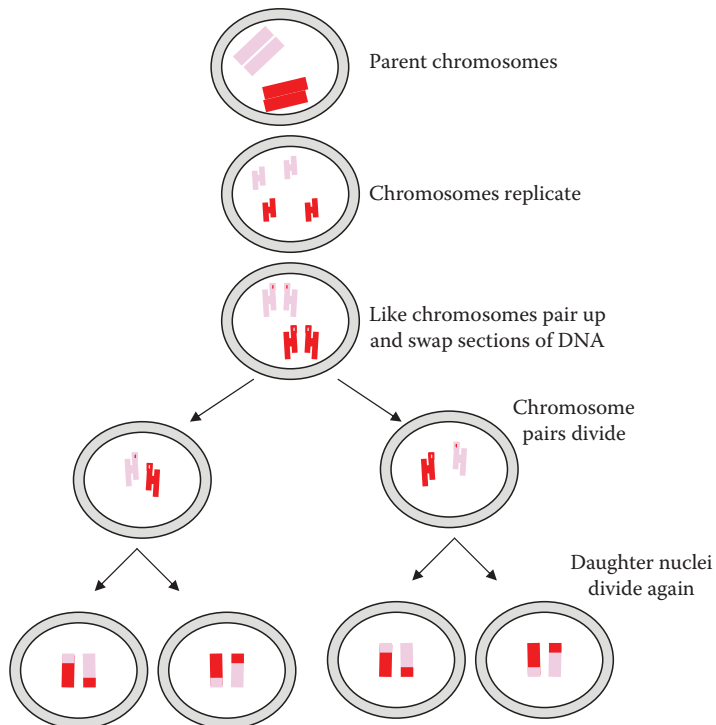


Figure 2.10 Stages of meiosis.

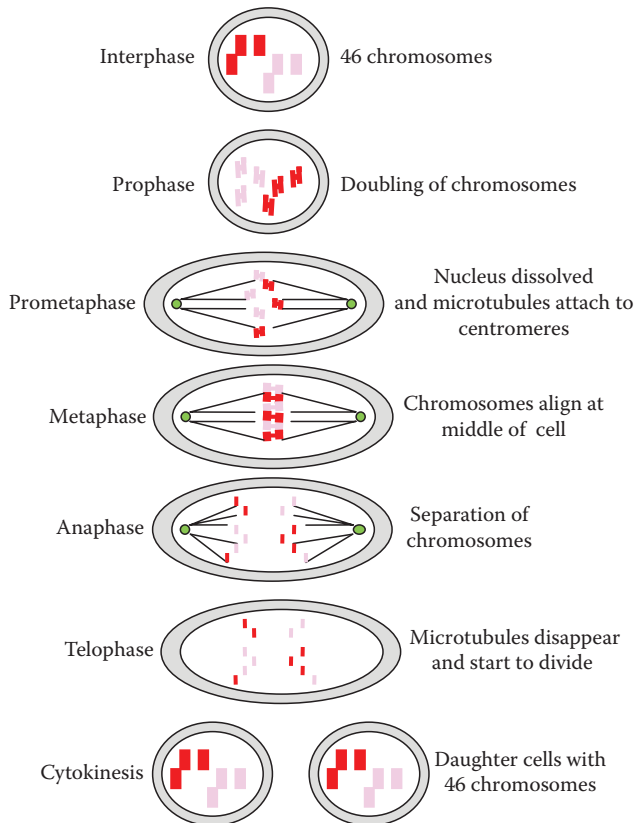


Figure 2.11 Stages of mitosis.

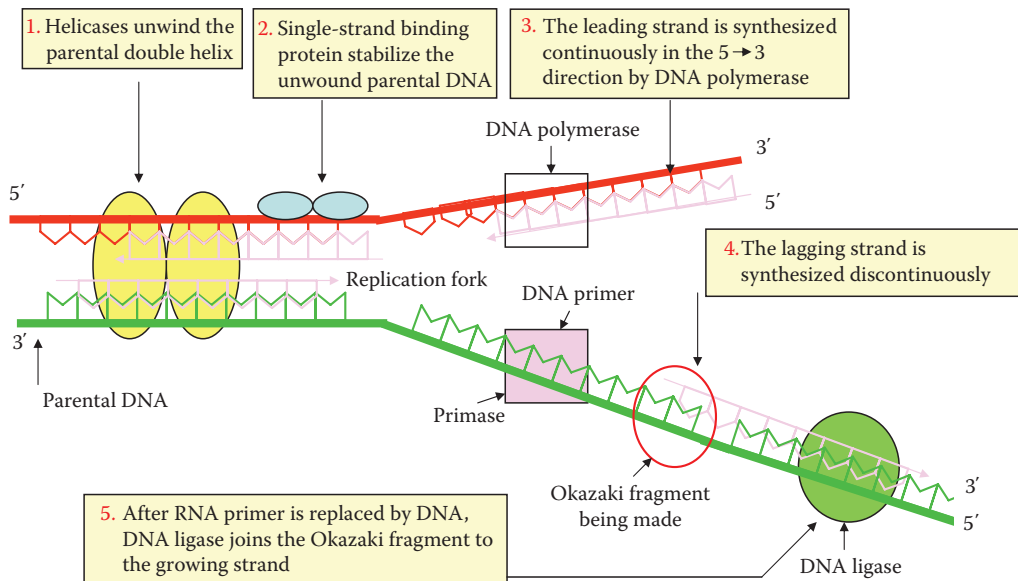


Figure 2.12 DNA replication process.

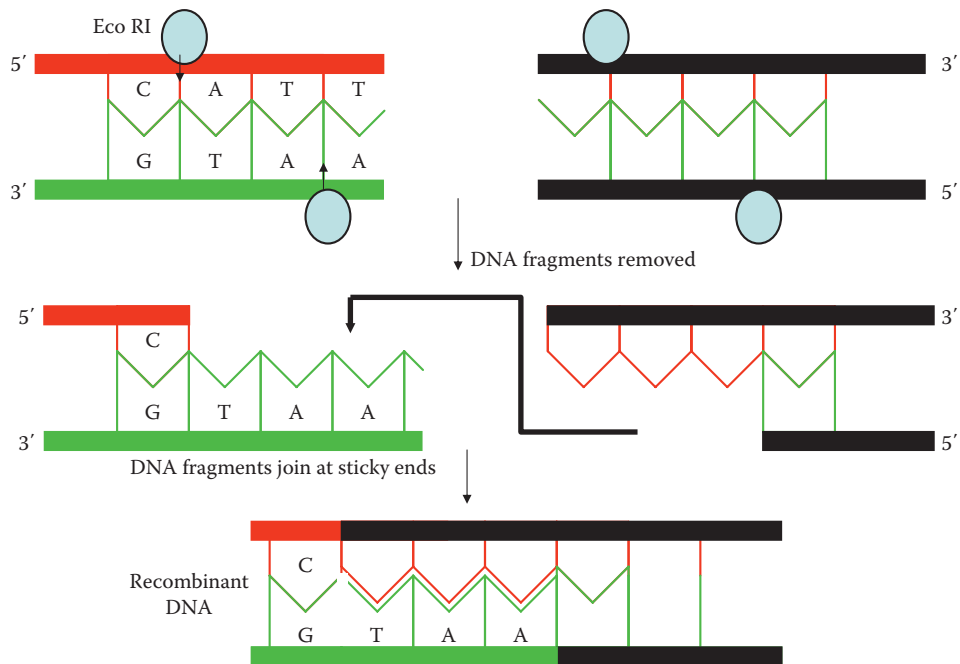


Figure 2.13 Role of restriction enzyme in making recombinant DNAATTCCC5.

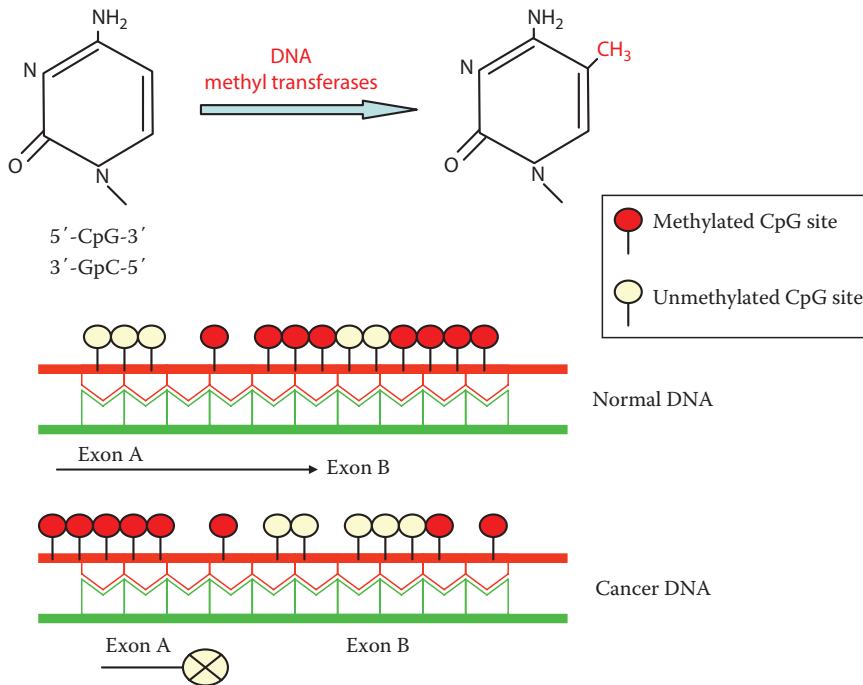


Figure 2.14 DNA methylation.

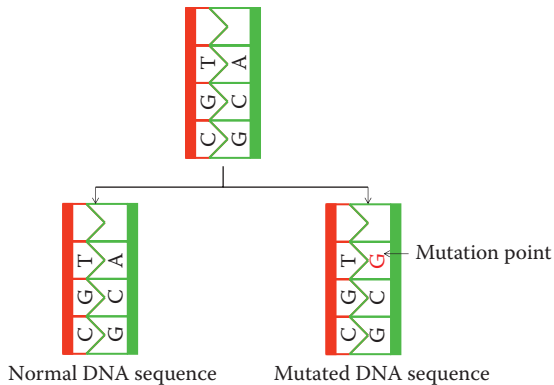
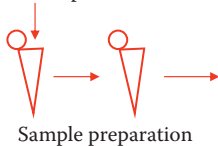


Figure 2.15 DNA mutation.

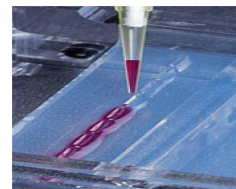
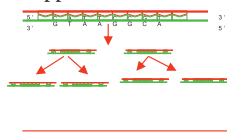
Forward and reverse primers

DNA sample

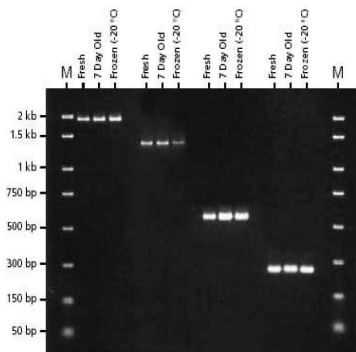


PCR machine

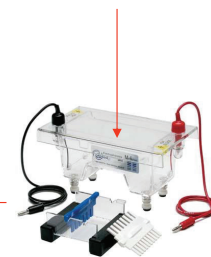
Multi-fication of DNA
happened in the PCR



Sample loading on gel



Gel documentation system



Gel electrophoresis

Figure 2.16 Steps in the PCR.

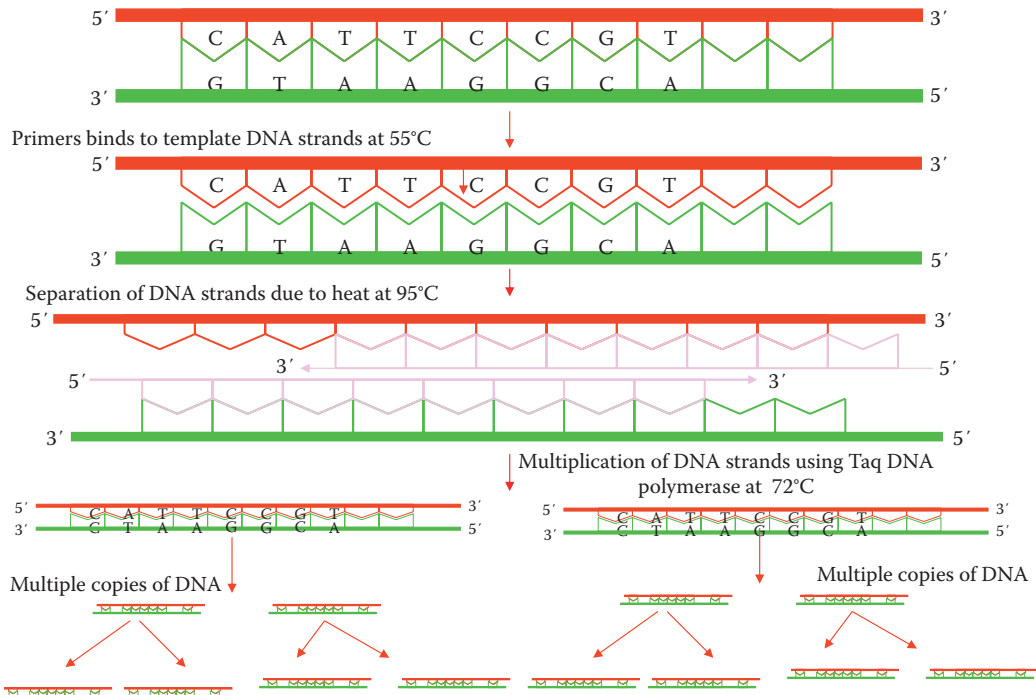


Figure 2.17 Amplification of DNA fragment.