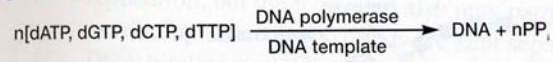


DNA polymerase reaction



The mechanism of chain growth

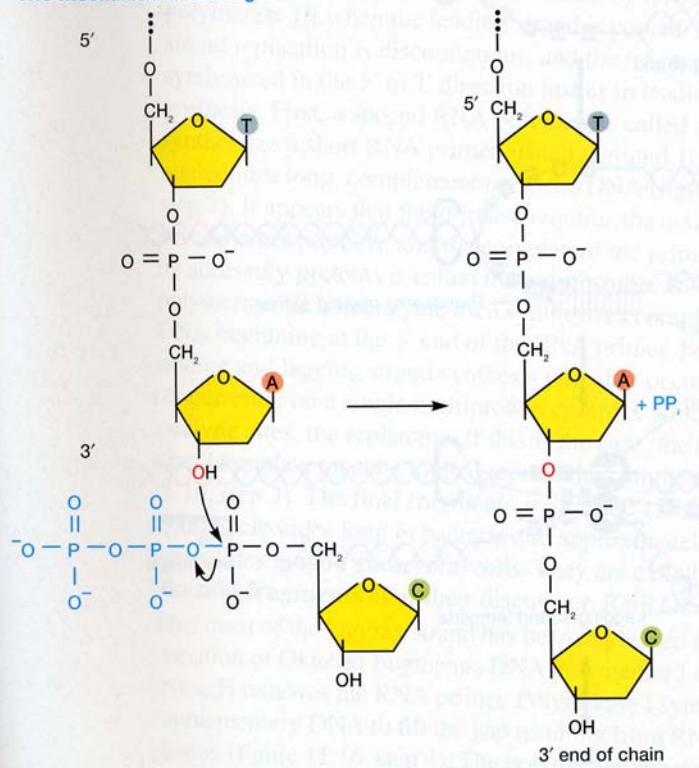


Figure 11.14 The DNA Polymerase Reaction and Its Mechanism.

The mechanism involves a nucleophilic attack by the hydroxyl of the 3' terminal deoxyribose on the alpha phosphate group of the nucleotide substrate (in this example, adenosine attacks cytidine triphosphate).