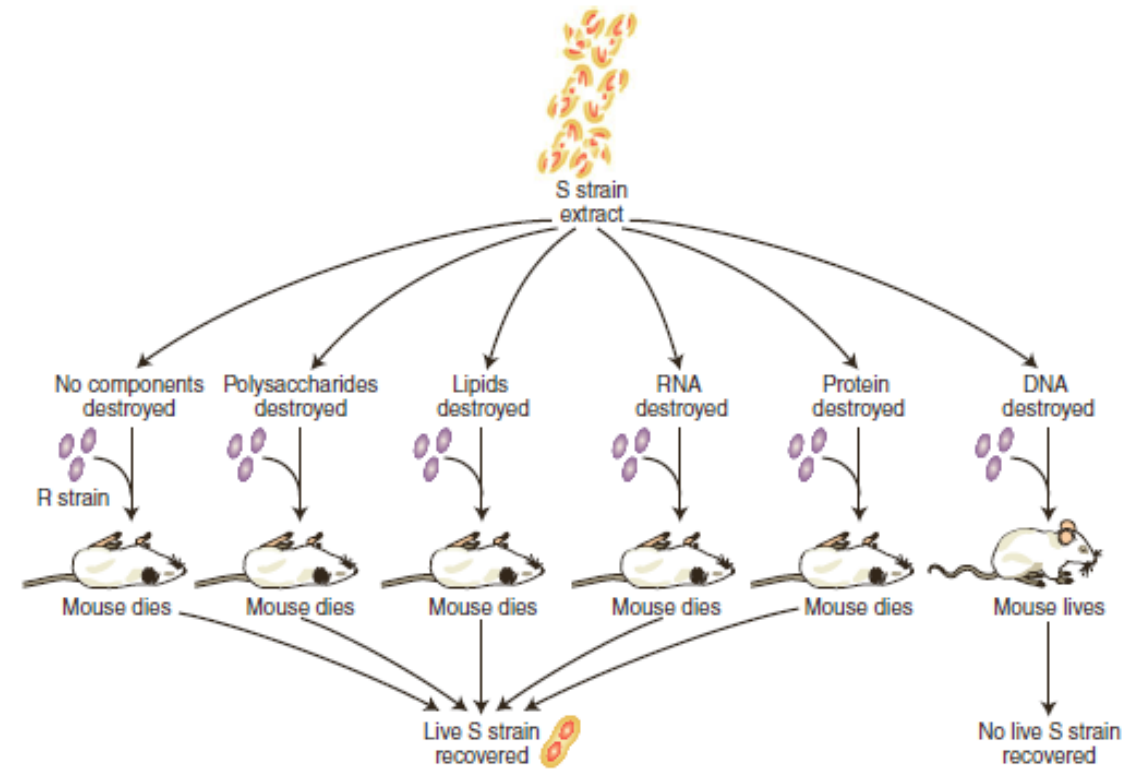
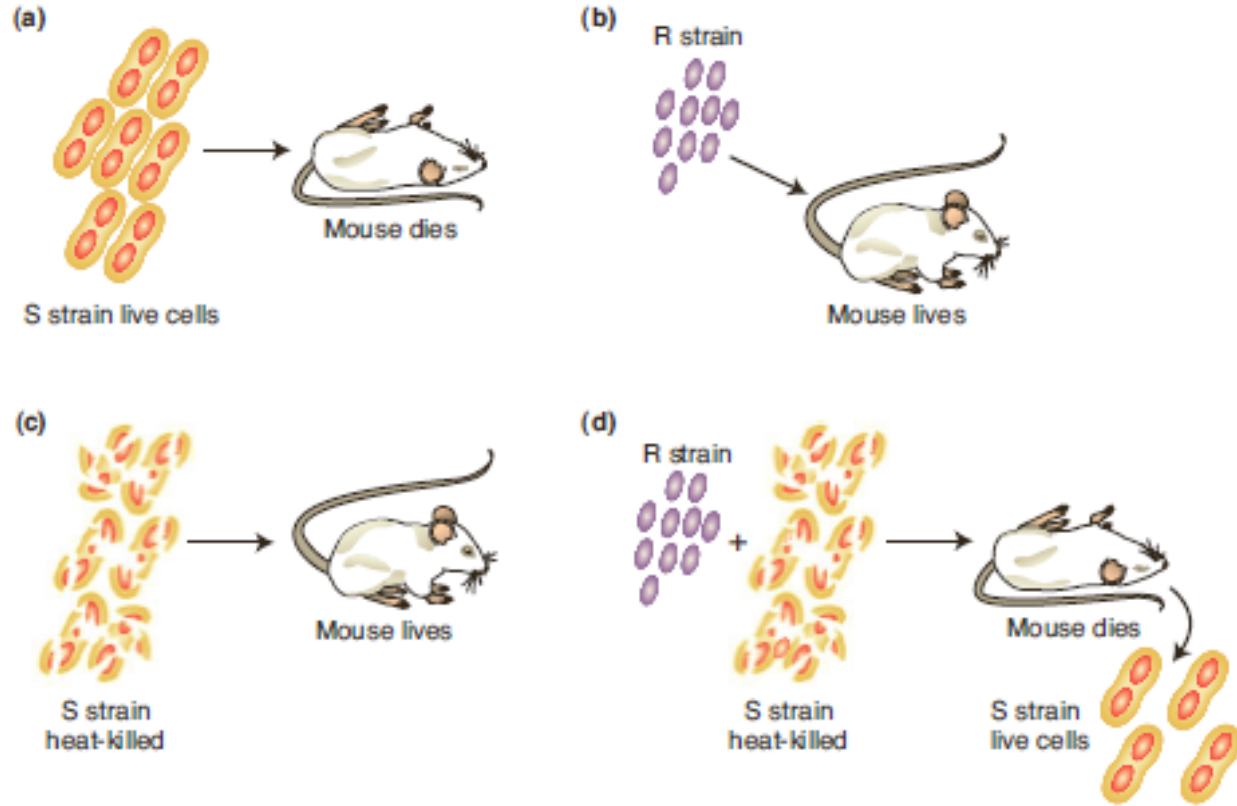
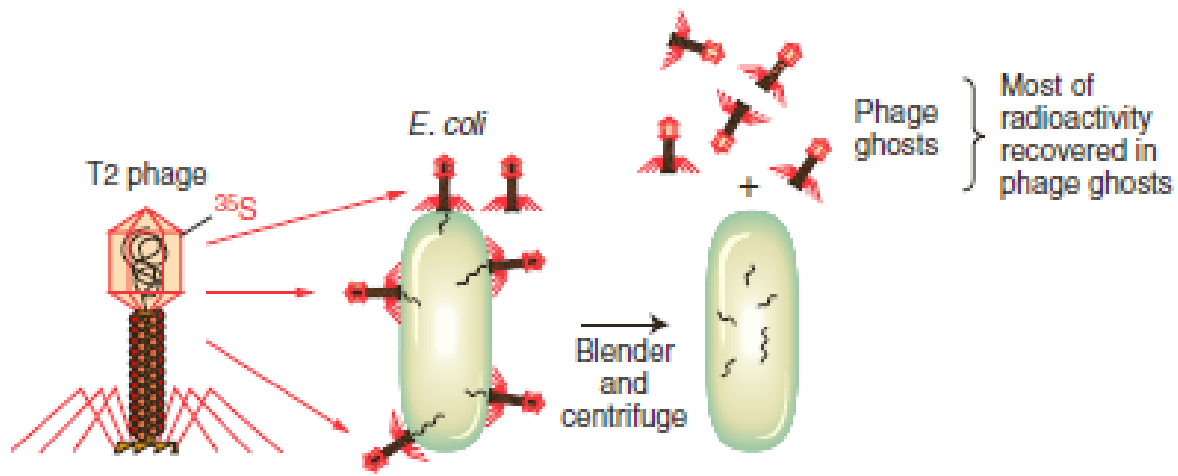
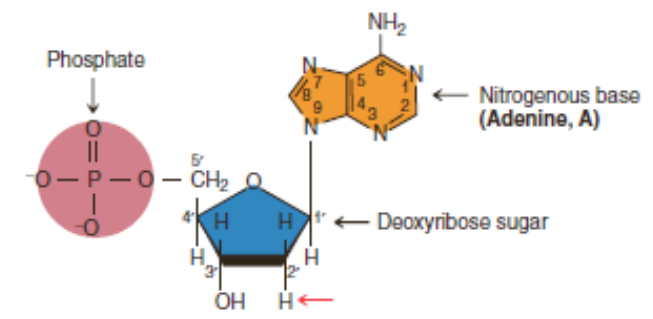


7. DNA: Yapısı ve Replikasyon

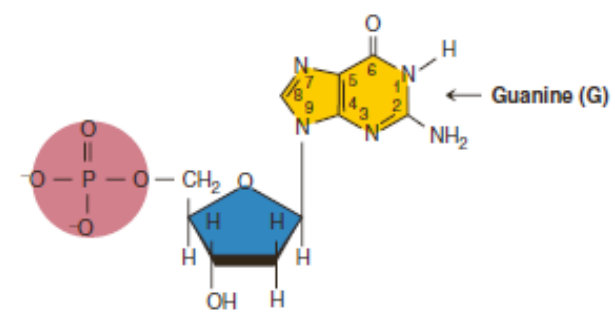




Purine nucleotides

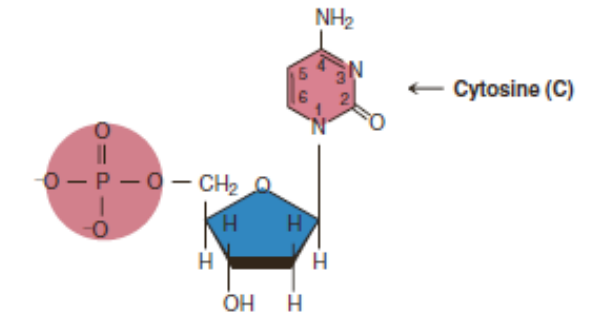


Deoxyadenosine 5'-monophosphate (dAMP)

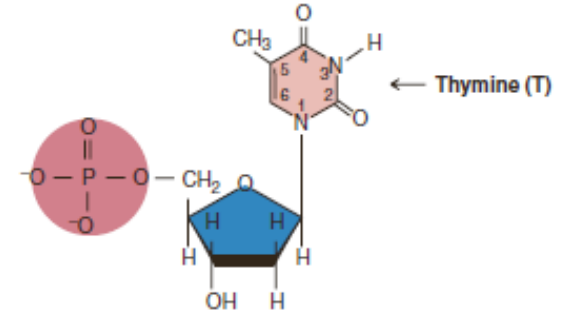


Deoxyguanosine 5'-monophosphate (dGMP)

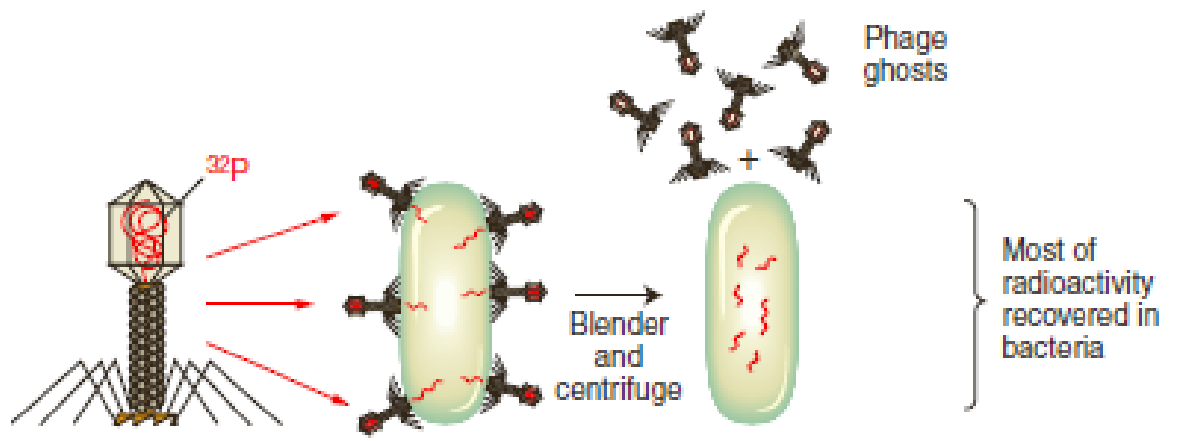
Pyrimidine nucleotides

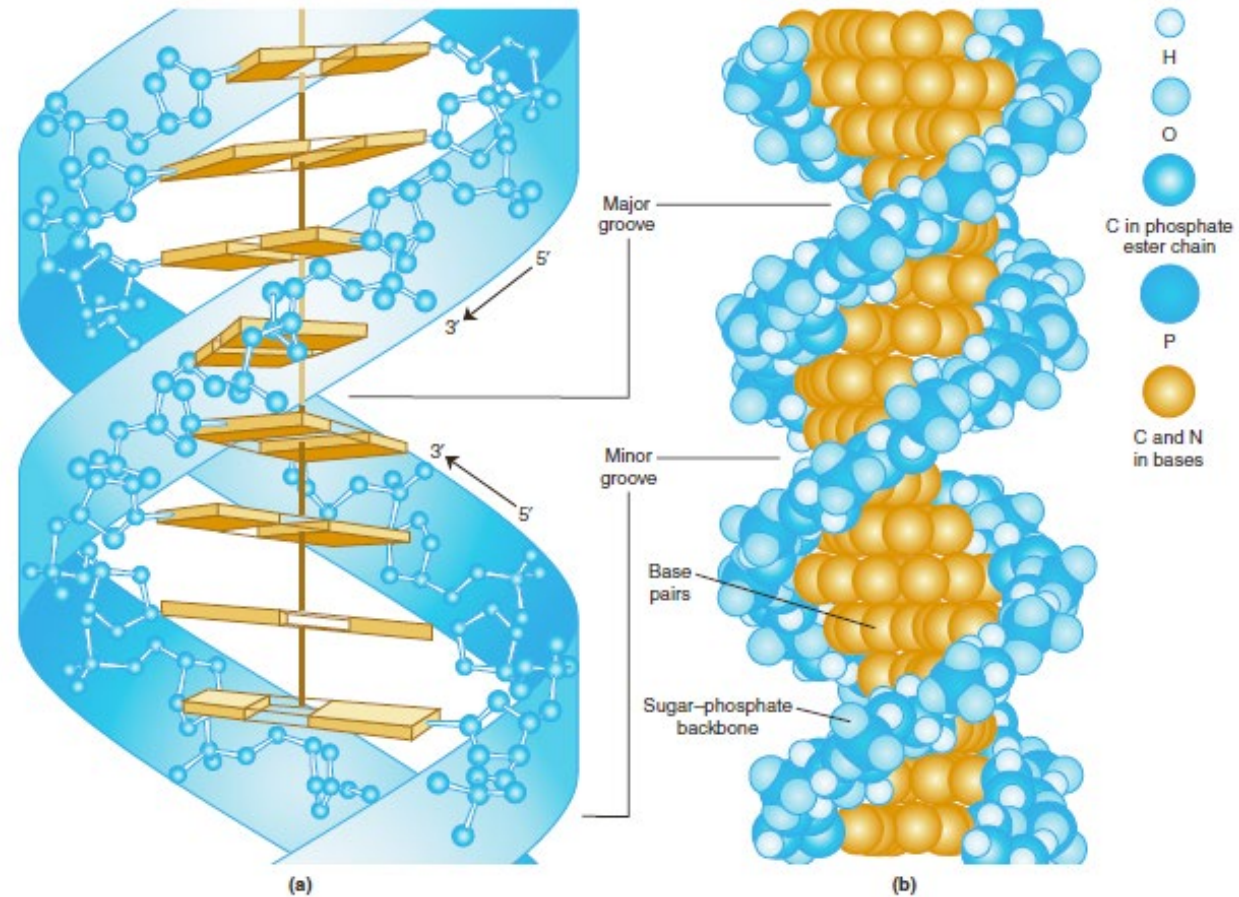
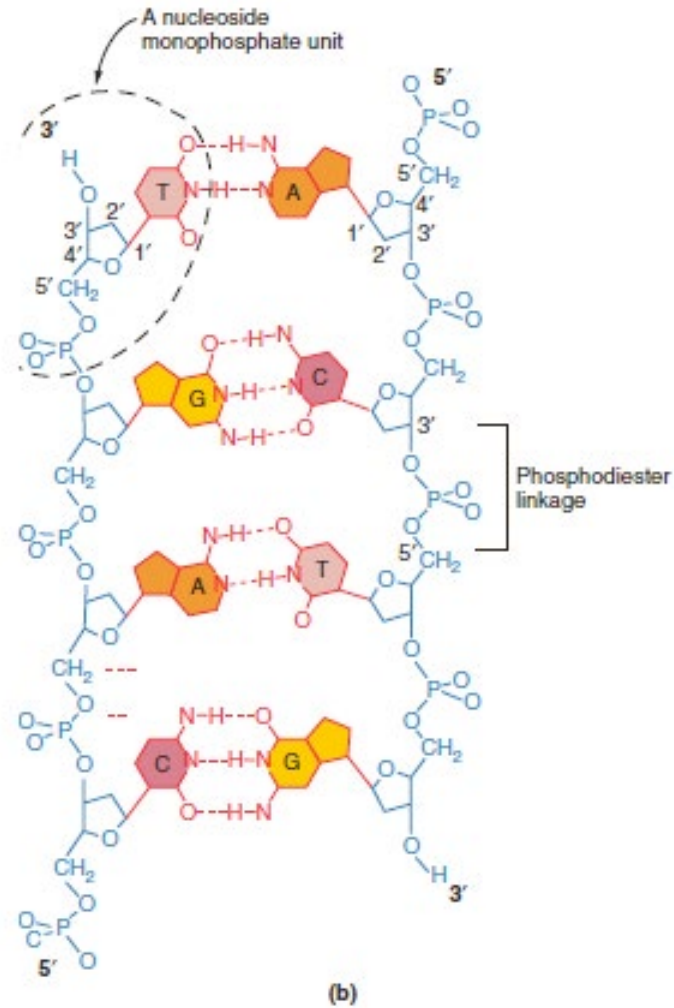
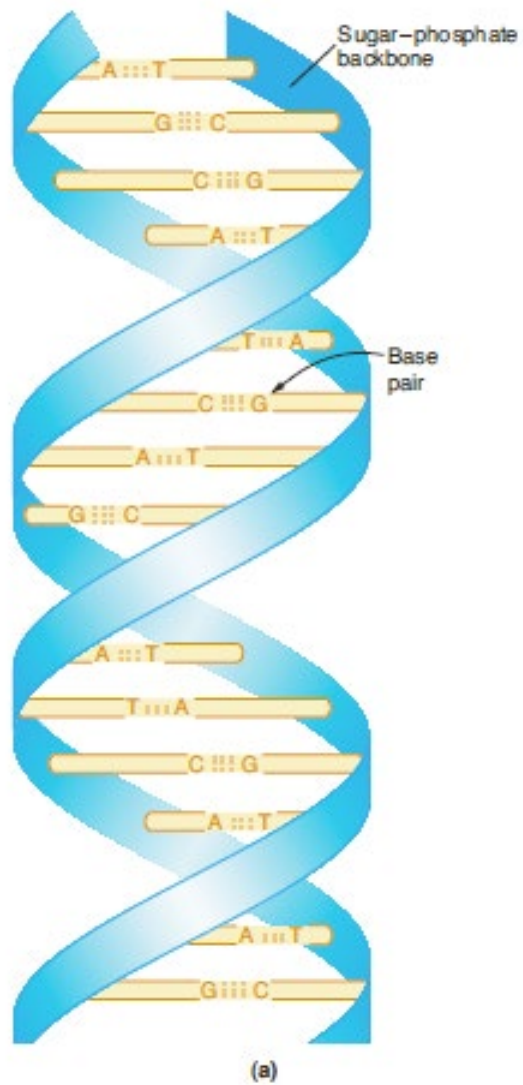


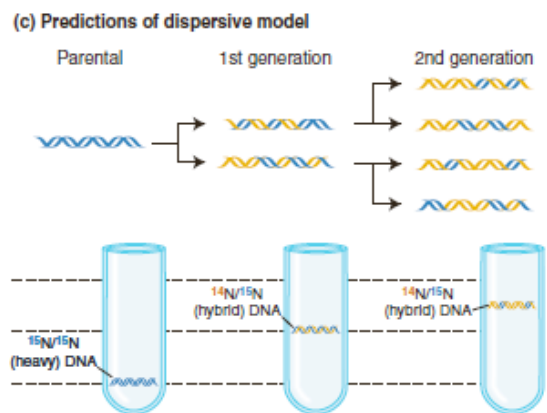
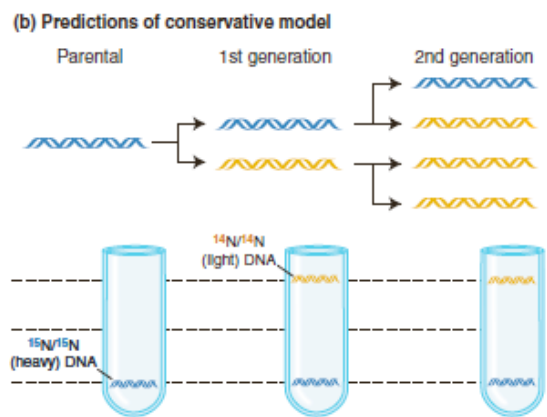
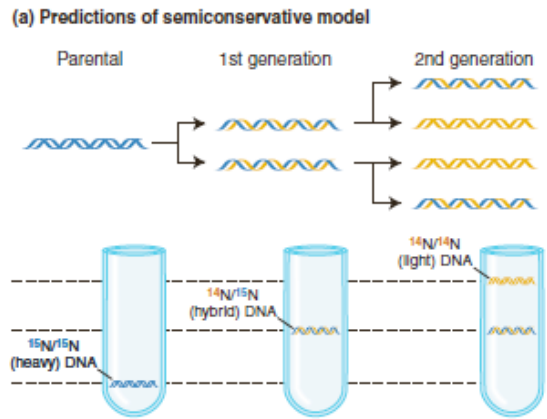
Deoxycytidine 5'-monophosphate (dCMP)



Deoxythymidine 5'-monophosphate (dTMP)



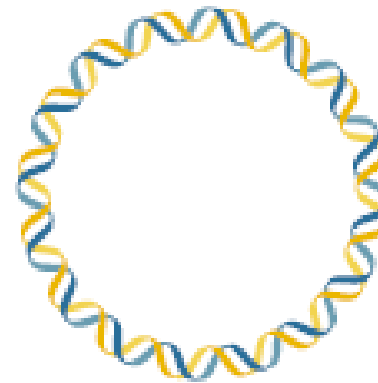




(a) Chromosome after one round of replication



Autoradiograph

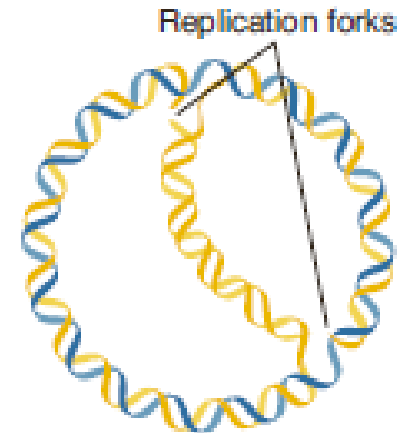


Interpretation

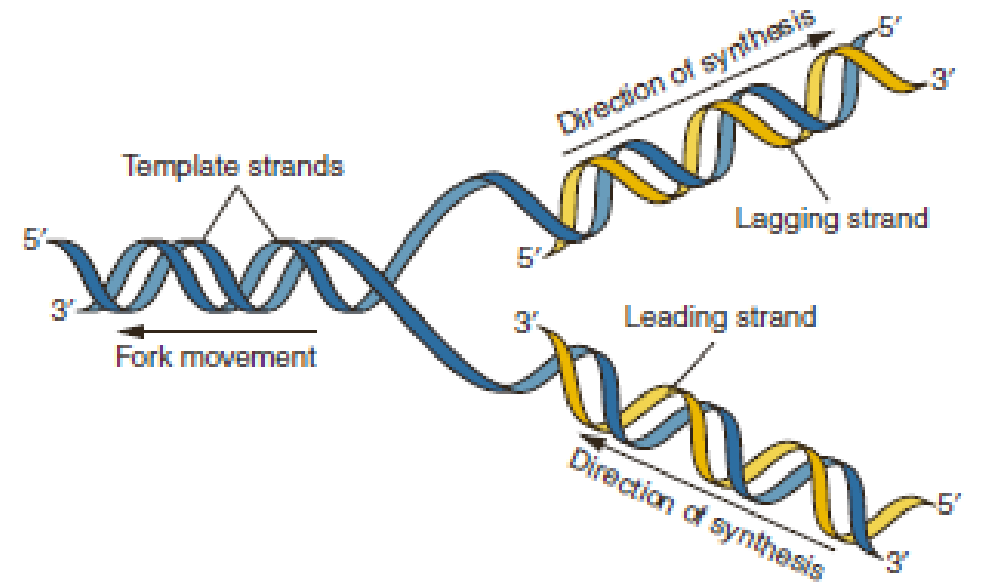
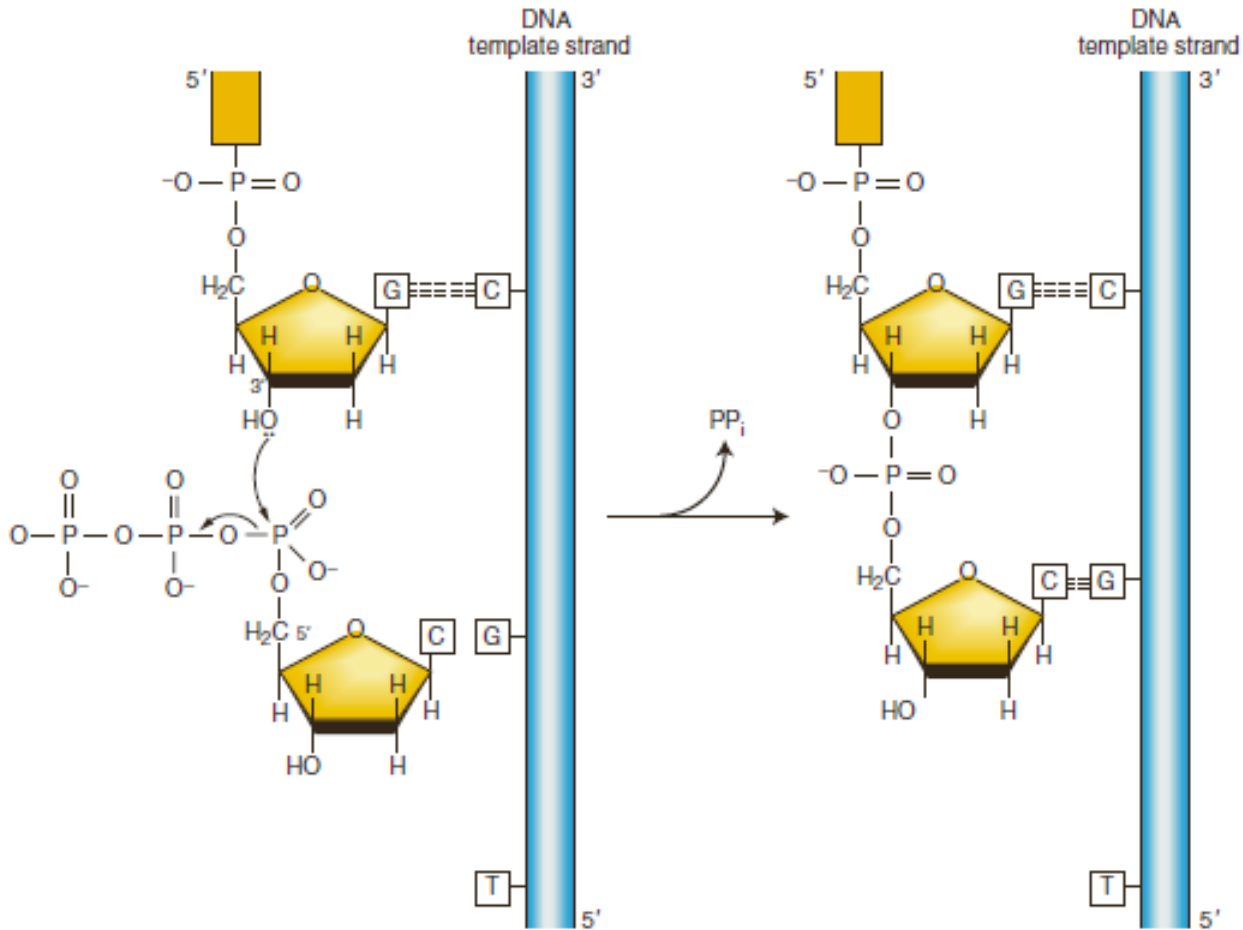
(b) Chromosome during second round of replication



Autoradiograph



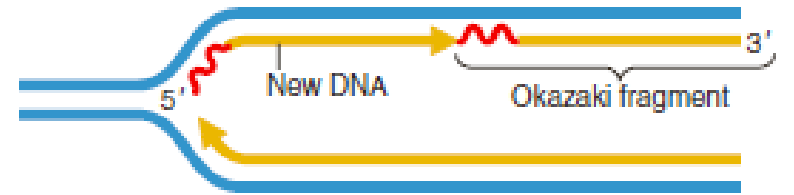
Interpretation



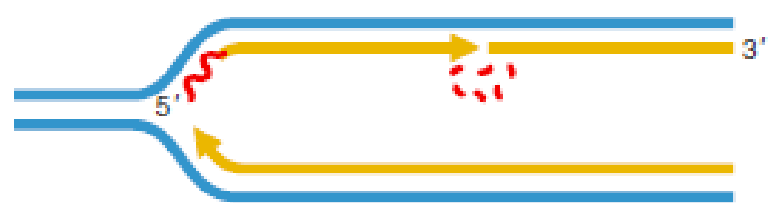
1. Primase synthesizes short RNA oligonucleotides (primers) copied from DNA.



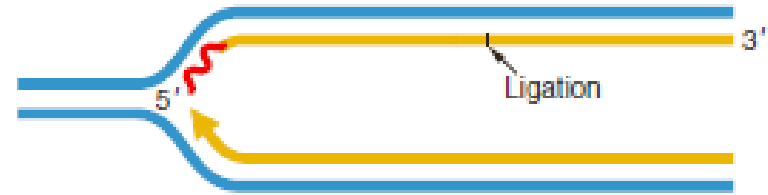
2. DNA polymerase III elongates RNA primers with new DNA.



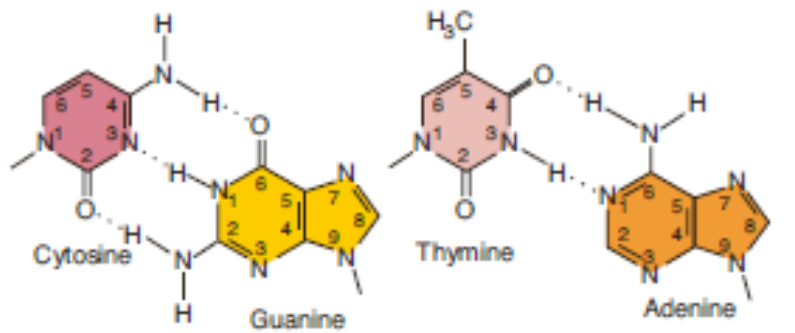
3. DNA polymerase I removes RNA at 5' end of neighboring fragment and fills gap.



4. DNA ligase connects adjacent fragments.



(a) Normal base pairing



(b) Mismatched bases

