

DNA Replication Notes

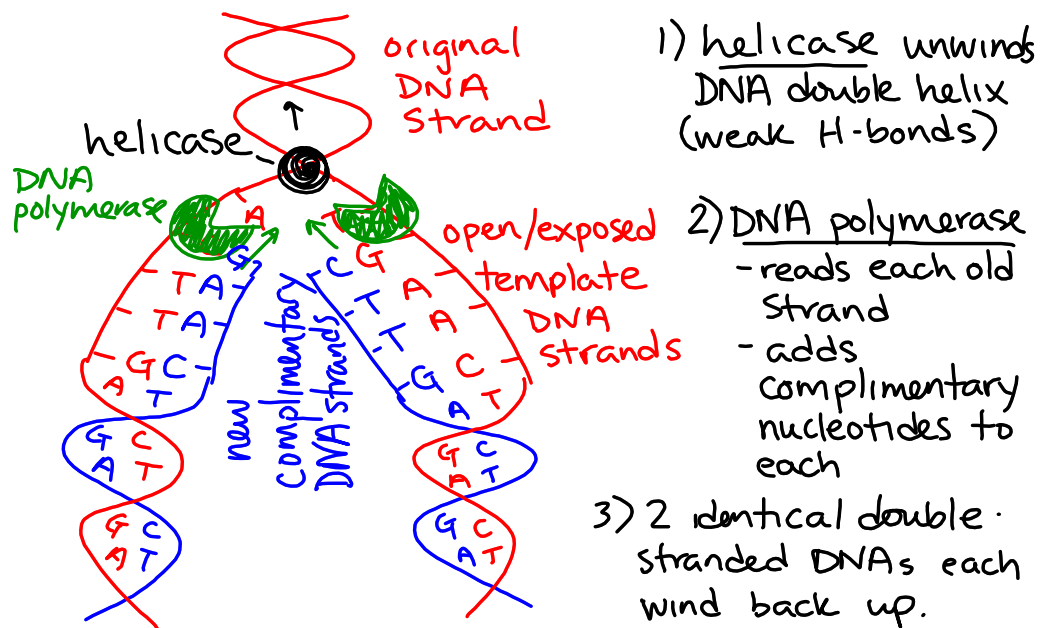
Pg 30

Cells must replicate DNA before they divide

- Each daughter cell needs a complete set of genes

DNA replication is possible because DNA is:

- double stranded
- strands are complimentary



double stranded
DNA result

Result of DNA replication: 2 identical double-stranded DNA molecules

- when condensed: sister chromatids

DNA replication NOT perfect

- DNA polymerase makes mistakes, esp. when DNA is damaged by chemicals (e.g. smoking) or radiation (UV rays, X-rays, etc.)
- Errors in replication are the ultimate source of MUTATIONS