

Molecular Genetics Study Guide

Use your notes to fill in this information that you need to focus on for your test.

DNA and RNA Structure:

Nucleic Acid:	DNA	RNA
# of Strands	2	1
Types of Bases	A T C G	A U C G
Sugar	deoxyribose	ribose
Base pairing rules	AT, CG	AU, CG

Label the 3 parts of a nucleotide:



Write the complementary strand of DNA using base-pairing rules

DNA A T A G C C G T A A C T
 DNA T A T C G G C A T T G A

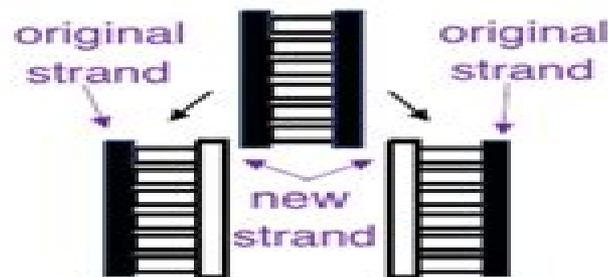
DNA Replication:

3 Enzymes in DNA Replication	What they do
1. helicase	separates DNA strands
2. DNA polymerase	adds nucleotides and proofreads
3. ligase	links new pieces of DNA

DNA is semiconservative. What does that mean? each DNA molecule consists of an original strand and a new strand.

When does DNA replication happen? S-phase of interphase

Label the image to the right with original strand and new strand.



Molecular Genetics Study Guide Answer

DJ Losen



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