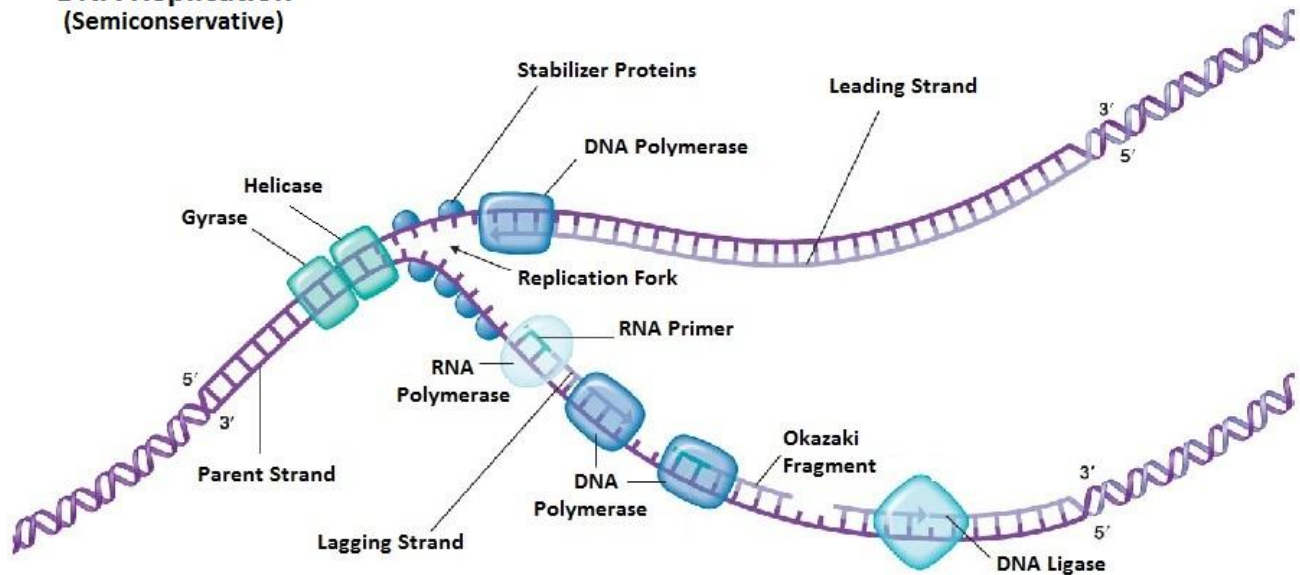


Biology

DNA Replication

DNA Replication (Semiconservative)



Enzymes

Helicase – Unzips the DNA double helix

Gyrase – Releases torque pressure from the unwinding DNA

Stabilizer Proteins – Keep unzipped DNA from binding to itself

DNA Polymerase – Synthesizes new DNA and chops up RNA primers

RNA Polymerase – Synthesizes an RNA primer

DNA Ligase – Connects Okazaki Fragments by inserting DNA bases between them to replace the RNA primer

DNA/RNA

Parent Strand – Parental DNA that is being unzipped and copied

Leading Strand – Copied continuously

Lagging Strand – Copied discontinuously, has Okazaki fragments

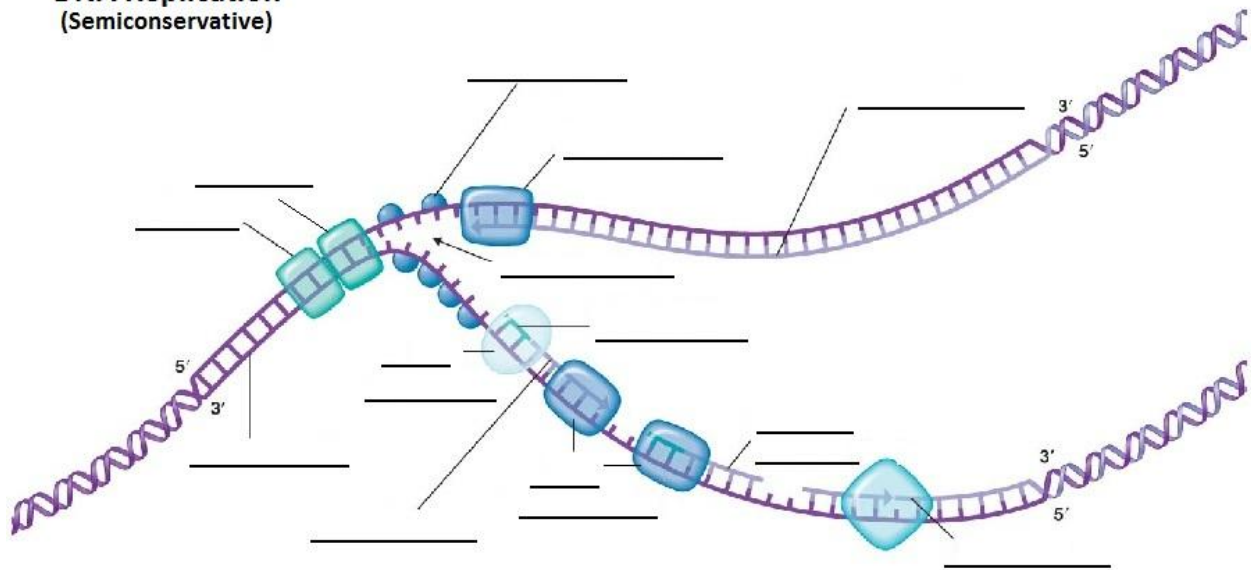
Okazaki Fragment – Pieces of Discontinuous DNA, connected by DNA Ligase

RNA Primer – A small piece of RNA for DNA polymerase to begin synthesis of new DNA from

Replication Fork – The place where the two strands of parental DNA separate

Biology

DNA Replication (Semiconservative)



Word Bank

Helicase
Gyrase
DNA Polymerase
RNA Polymerase
DNA Ligase
Stabilizer Proteins

Replication Fork
Leading Strand
Lagging Strand
Parent Strand
Okazaki Fragment
RNA Primer