

DNA Replication

REF:

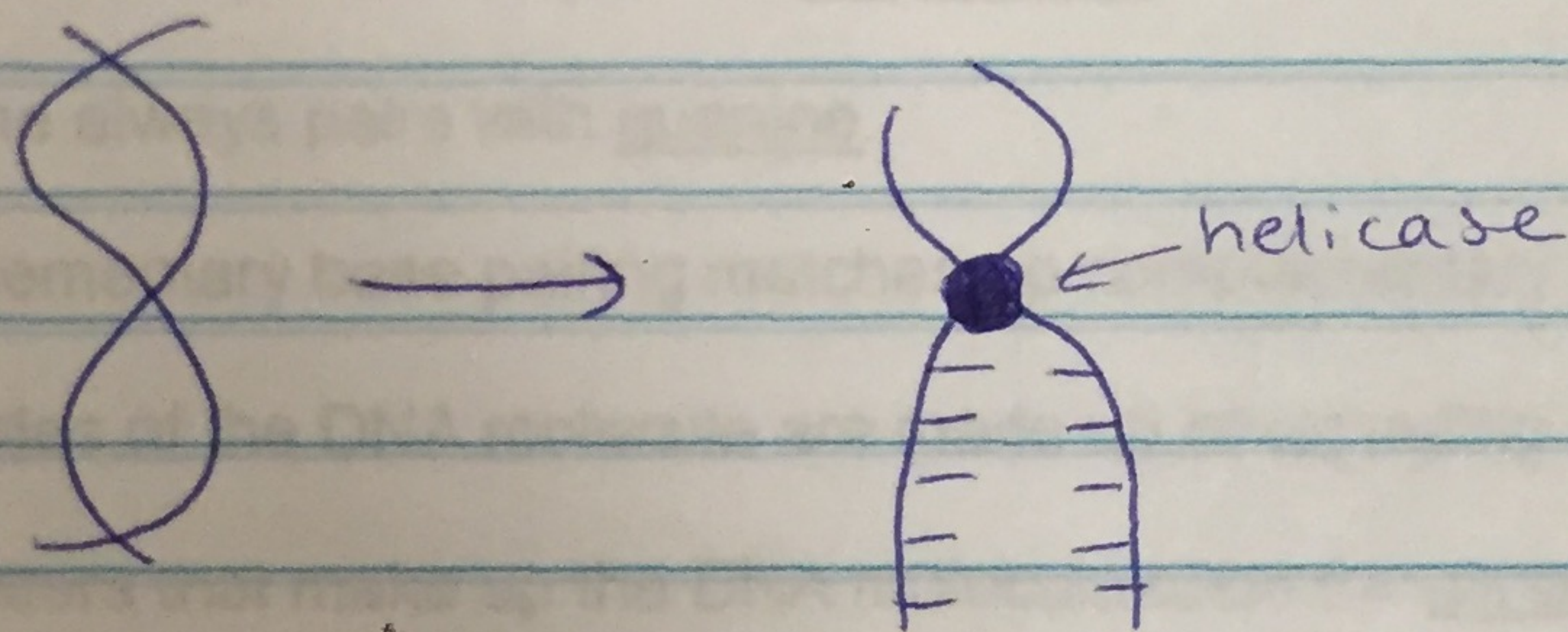
* DNA Replication happens in...

Eukaryotes	}	Prokaryotes
* NUCLEUS		CYTOPLASM

HEN: BEFORE cell division!

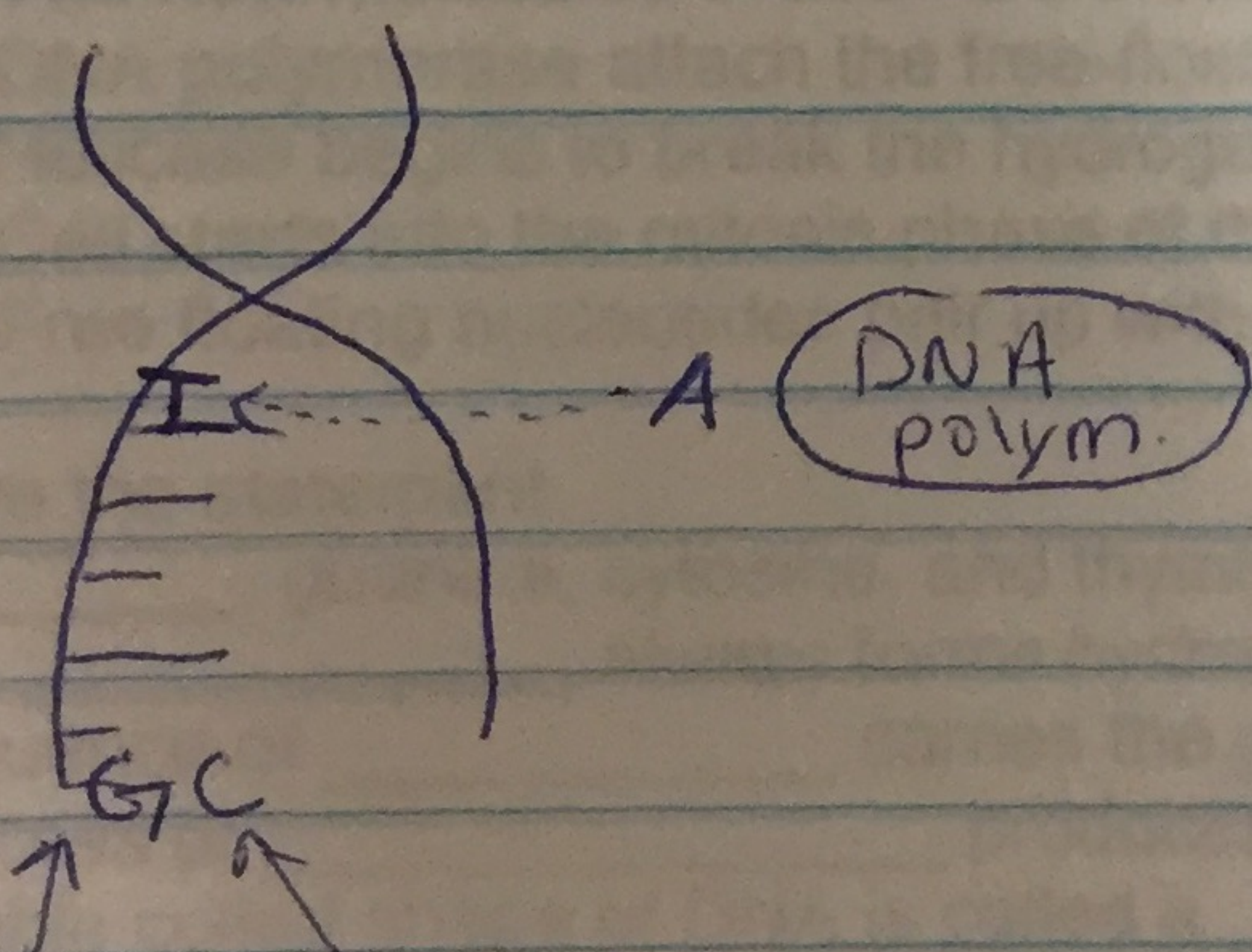
STEPS OF DNA REPLICATION

① **HELICASE** BREAKS the HYDROGEN BONDS / unzips the double helix



(ase = enzyme) (ose = sugar)

② **DNA polymerase** attaches the matching base pair and ~~rebuilds~~ proofreads incorrect pairs!



* works on the LEADING strand to create LAGGING strand

5' → 3' direction

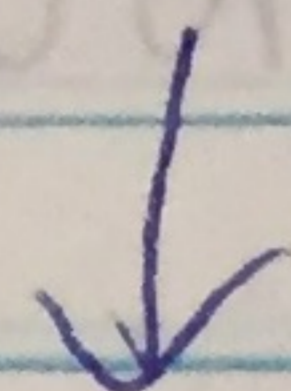
leading strand lagging (NEW) strand

(Hydrogen bonds)

DNA Replication

3) Forms a new double helix!

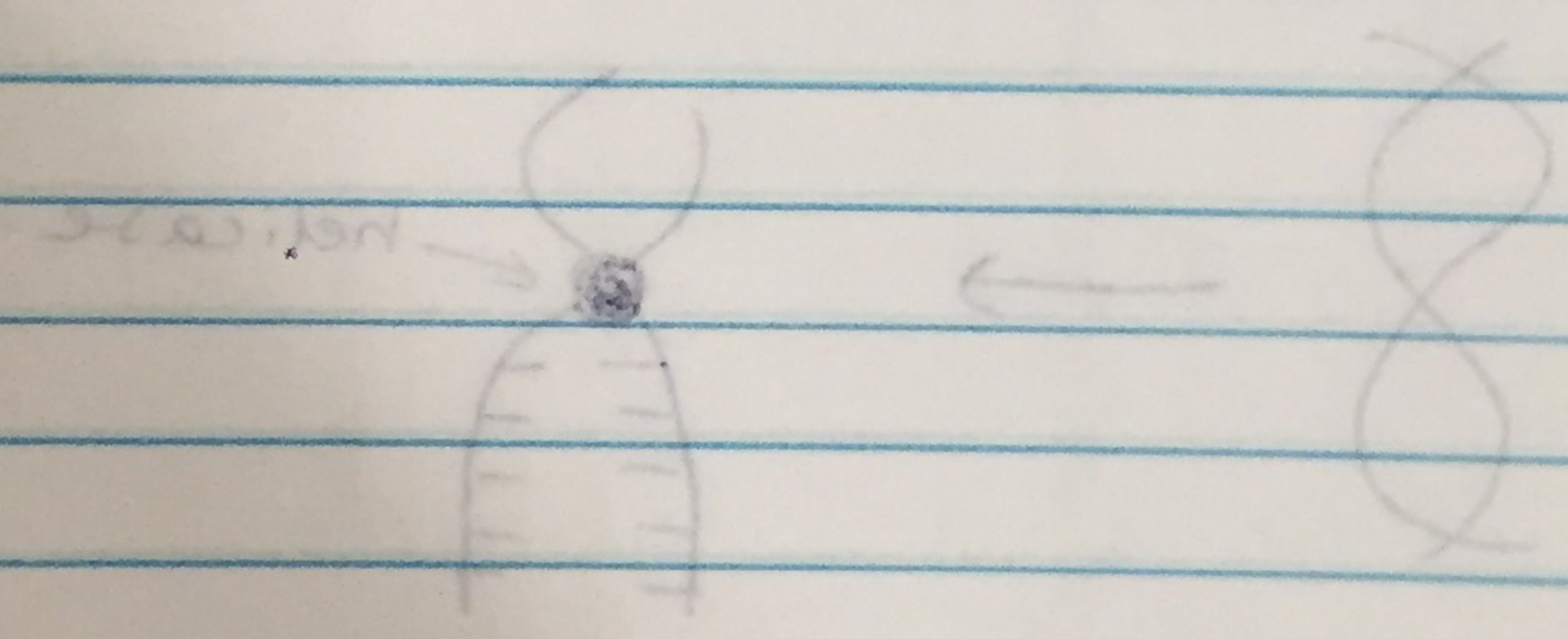
DNA Replication is SEMI-CONSERVATIVE



Contains one old + one new strand

STEPS OF DNA REPLICATION

1) HELICASE



2) DNA POLYMERASE

