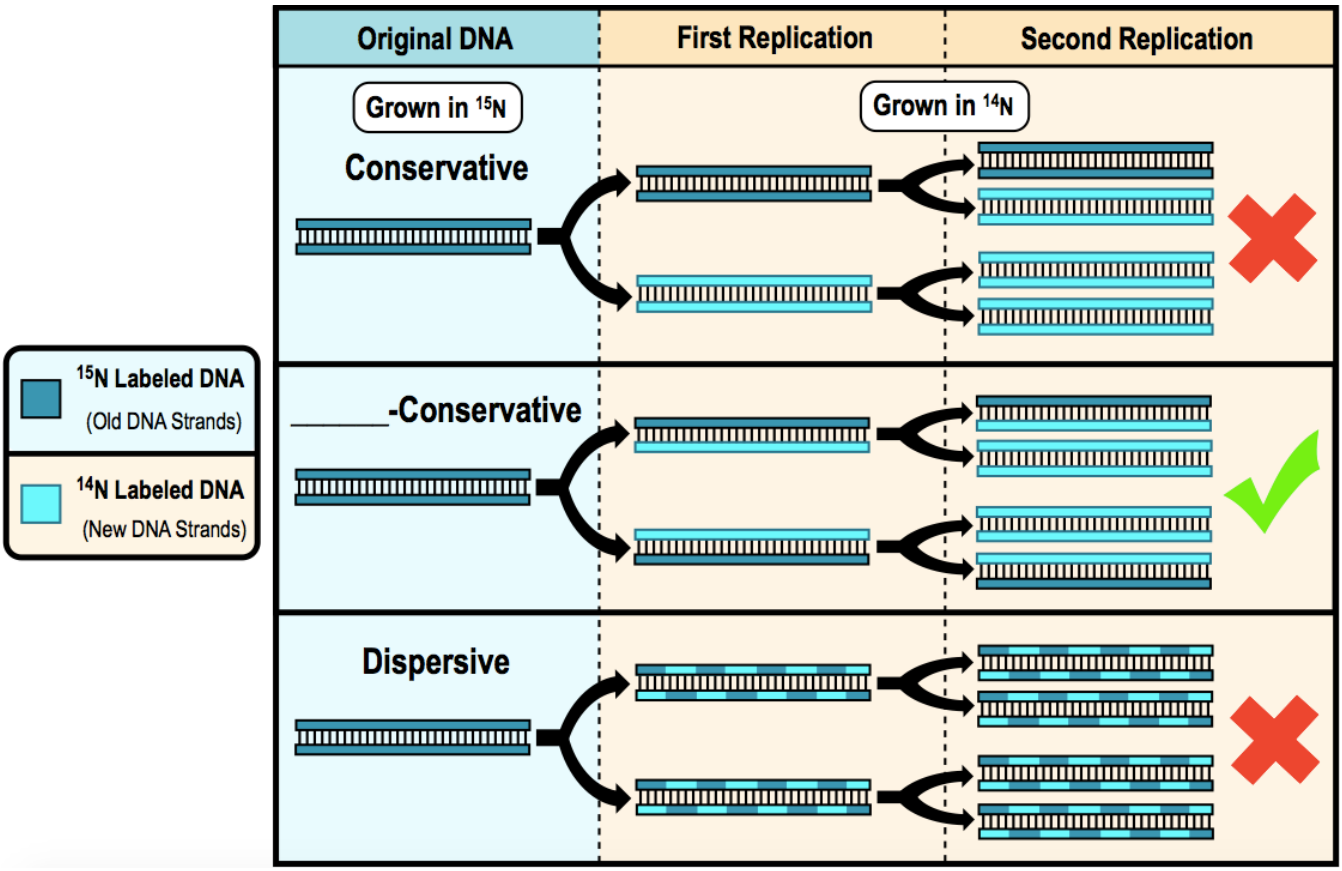
CONCEPT: MESELSON-STAHL EXPERIMENT

●In 1958, Meselson & Stahl demonstrated that *E. coli replicates* DNA via the _____-_____ model.

□ **Semi-Conservative Model**: replicated DNA molecules have ____ *old/parental* strand & ____ *newly-built* strand.

□ Old/parental strands *separate* & act as _____ to synthesize new DNA that's *complementary* to it.

EXAMPLE: The Meselson-Stahl Experiment confirmed Semi-conservative DNA Replication.



PRACTICE: The Meselson-Stahl experiment demonstrated that DNA replication produces new molecules of DNA each containing…

a) Two old strands of DNA.
b) Two new strands of DNA.
c) Two stands composed of variable proportions of old and new DNA.
d) One old strand of DNA and one new strand of DNA.

PRACTICE: The DNA of a phage was injected into the bacterial host, but the protein coat remained outside. The viral DNA directed the host to replicate the new phage viruses. Which scientist(s) are associated with this finding?

a) Hershey and Chase.
b) Meselson and Stahl.
c) Thomas and Walters.
d) Watson and Crick.
e) Chargaff.