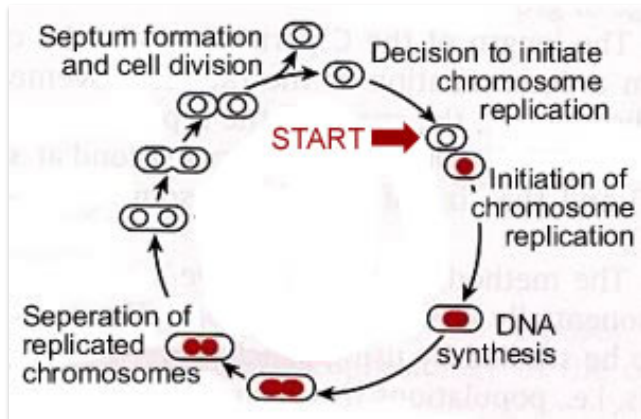


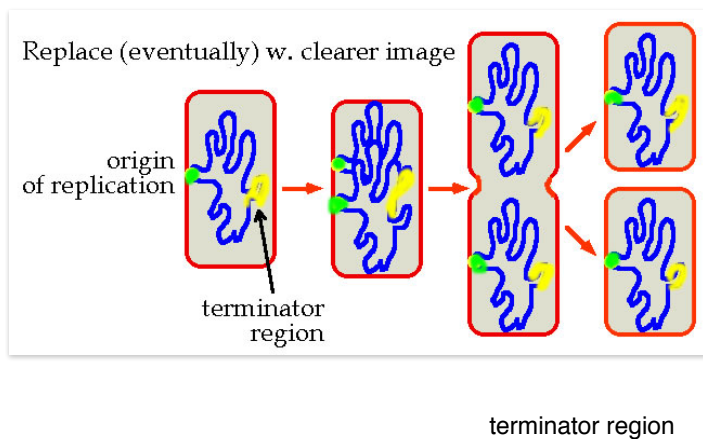
simple asexual reproduction in bacteria

horizontal gene transfer, only vertical transmission

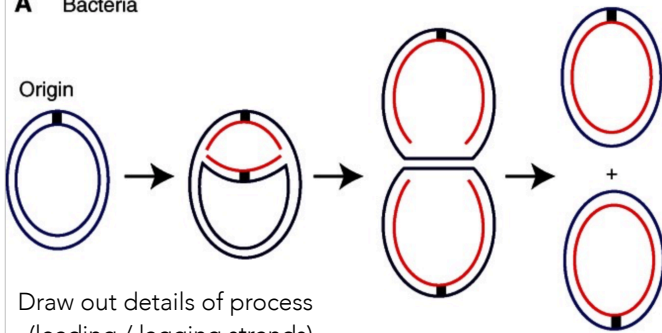
circular chromosome / check points



Is the origin of replication sequence a gene?



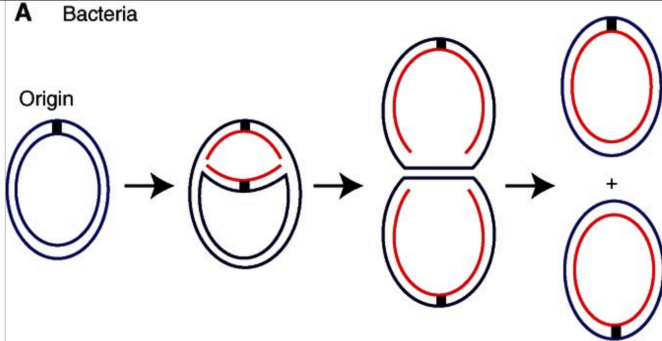
A Bacteria



Draw out details of process
(leading / lagging strands)
where is terminator region?

- How would mutating the origin or terminator regions of a prokaryotic chromosome influence the cell's reproduction?

A Bacteria



In *E. coli*, there are ~4,400,000 base pairs of DNA, and each DNA synthesis enzyme moves a ~ 600 bp/s

how long does DNA replication take

Questions to answer and ponder:

- What factors act to insure that each (prokaryotic) cell generated contains a complete genome?
- Describe what you would expect to happen, and why, if a prokaryotic cell received an incomplete genome.

