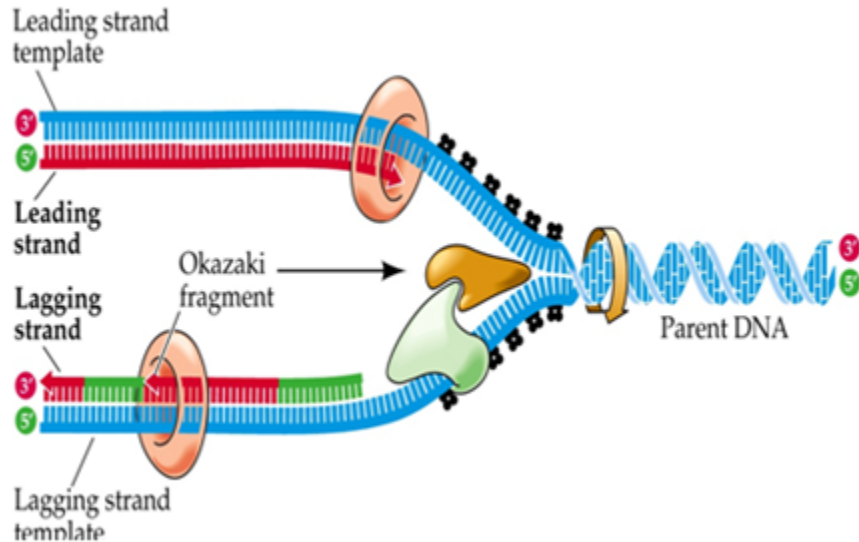


## DNA Replication



Cells reproduce by a process called mitosis. This can only occur if the chromosomes (DNA) replicates. This occurs in the nucleus with the help of several enzymes very quickly. If all goes well, both copies will be identical. The copies will be genetically different only if a mutation occurred. Some cells will replicate their DNA continuously for your entire life while others will never divide.

Answer all of the following questions/statements on a GOOGLE SLIDES presentation.

- What is the difference between chromatin, a chromosome and a gene?
- What is meant by the term “semi conservative” in terms of DNA replication? INCLUDE A PICTURE.
- How are homologous chromosomes and sister chromatids different? INCLUDE A PICTURE.
- How are sister chromatids held together?
- What is a karyotype and what can it tell us about an individual? INCLUDE A PICTURE OF A KARYOTYPE OF A PERSON WITH DOWN SYNDROME.
- Briefly describe DNA replication. Include the major enzymes and their function. Do not forget about Okasaki Fragments. INCLUDE A PICTURE.