

You must hand write your answers!

1. How many chromosomes do prokaryotes have? \_\_\_\_\_
2. Where is the prokaryotic chromosome located? \_\_\_\_\_
3. How many chromosomes do humans have? \_\_\_\_\_
4. Do all eukaryotic organisms have the same amount of chromosomes found in humans? \_\_\_\_\_
5. What are histone proteins?
6. What are nucleosomes?
7. What does it mean when we say that DNA is replicated using the semi-conservative model?
8. What are the nucleotides found in DNA?
9. What are the nucleotides found in RNA?
10. What is DNA polymerase?
11. What are the differences between RNA and DNA?
12. DNA replication happens in the \_\_\_\_\_ to \_\_\_\_\_ direction.
13. What is primase?

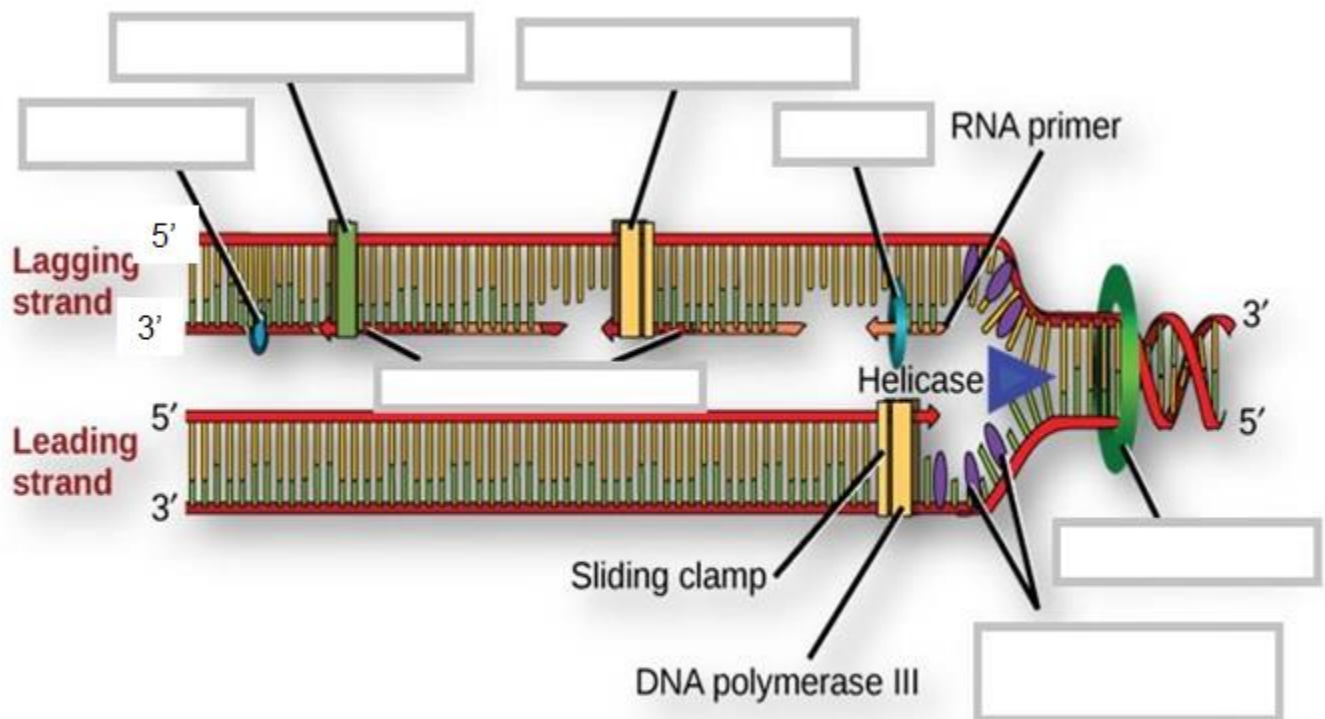
14. Why is a primer needed to start DNA replication?

15. What is helicase?

16. In eukaryotic DNA replication, why is there a lagging strand?

17. What are Okazaki fragments?

18. Label the following:



19. What is a silent mutation?

20. What is a missense mutation?

21. What is a frameshift mutation?

22. What is polymerase chain reaction?