



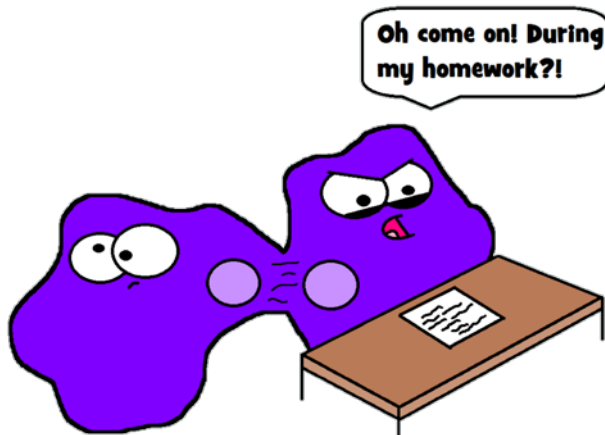
# Amoeba Sisters | Video Recap

NAME: \_\_\_\_\_

## Amoeba Sisters Video Recap: DNA Replication

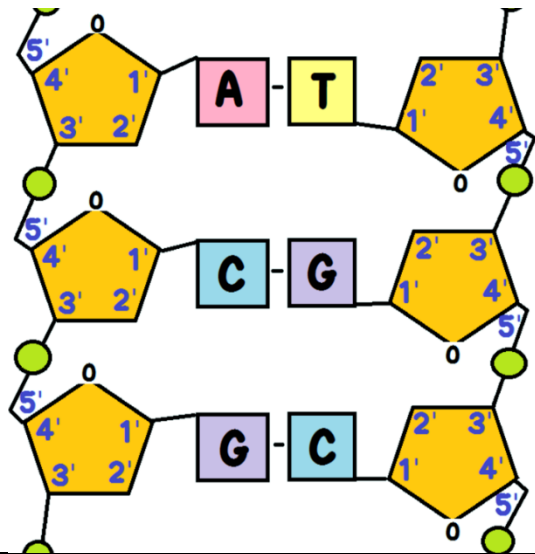
1. To understand DNA replication, we need to understand the "why." **Why** does DNA need to replicate before cells divide?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



In the below DNA diagram, label ONE of each bolded term:

- Deoxyribose (sugar)**. Total number in image? \_\_\_\_\_
- Nitrogenous base**. Total number in image? \_\_\_\_\_
- Hydrogen bond**. Total number in image? \_\_\_\_\_
- Phosphate**.
- Label 5' to 3' strand and 3' to 5' strand.



3. DNA Replication has many key players! These are just a few of the major key player **enzymes**. In your own words, describe each of their functions in DNA replication.

Helicase: \_\_\_\_\_

DNA Polymerase: \_\_\_\_\_

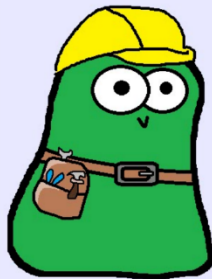
Primase: \_\_\_\_\_

Ligase: \_\_\_\_\_

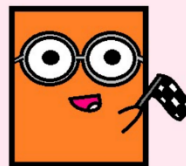
### Select Your Character



**Helicase**



**DNA Polymerase**



**Primase**



**Ligase**





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**Your turn to narrate!** Narrate the illustrations below to explain the sequence of events occurring in DNA replication.

4.	
5.	
6.	
7.	

8. Label the leading and lagging strands in the last picture. Explain what is meant by the “lagging” strand and why this occurs.