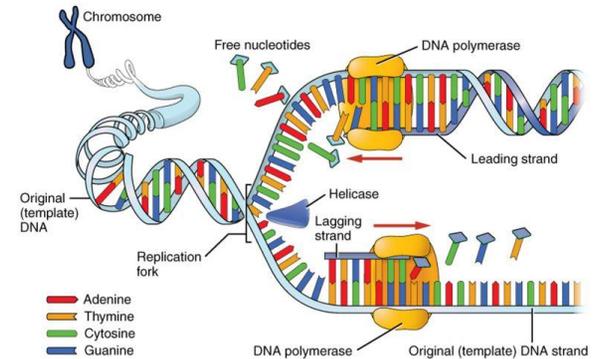


*Fold along the line and glue this side
down in your Biology Interactive
Learning Log (BILL)*

Unit 7: DNA

Learning goals: It's one thing to say the molecule called DNA carries genetic information, but it is quite another to explain how a molecule can manage all of the functions of the cell. DNA must not only specify how to assemble proteins, but how genes can be copied and inherited. DNA is a very special molecule with a very special structure. Understanding the structure of DNA is the key to understanding how genes work and what could go wrong resulting in disease or death.



Key concepts:

Nucleotide structure Base pairing and Chargaff's Rule DNA structure
Double helix model DNA replication

Essential Questions:

1. What are the chemical components of DNA?
2. What clues helped scientists solve the structure of DNA?
3. What does the double helix model tell us about DNA?
4. What are the steps involved in the process of DNA replication?
5. What role do DNA polymerase, helicase and ligase have in copying DNA?
6. How does DNA replication differ in prokaryotic and eukaryotic cells?

Can you show what
you know?

