

Name: _____

Period: _____

Activity: Construct a DNA Model

Instructions

1. Cut out each of the nucleotides (used the dash lines as a guide) and arrange them on a piece of construction paper. Remember the **Base-Pair Rule**.
2. In order to match the pairs, one of the nucleotides must be arranged upside down. This is intended. The sides of the DNA double helix are arranged in an **anti-parallel** fashion. Think of them like lanes on a highway going different directions.
3. Color each of the nucleotides

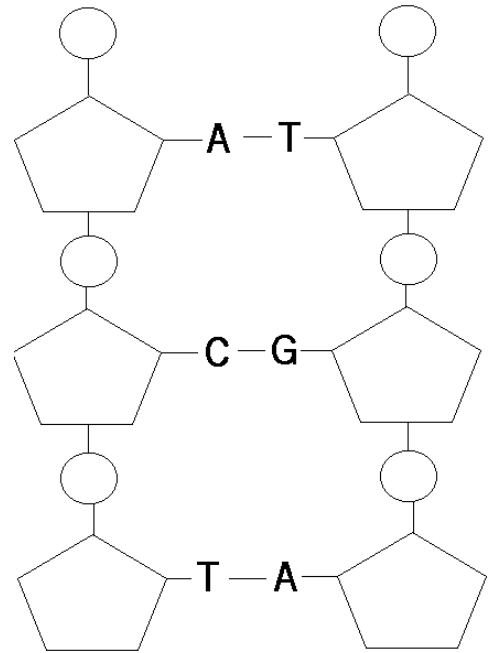
Thymine = orange | Adenine = green
Guanine = purple | Cytosine = yellow
Deoxyribose = blue
Phosphate = pink

Pre-Lab Questions:

1. Describe the base-pair rule.
2. What three things make up a nucleotide?
3. What does anti-parallel mean?

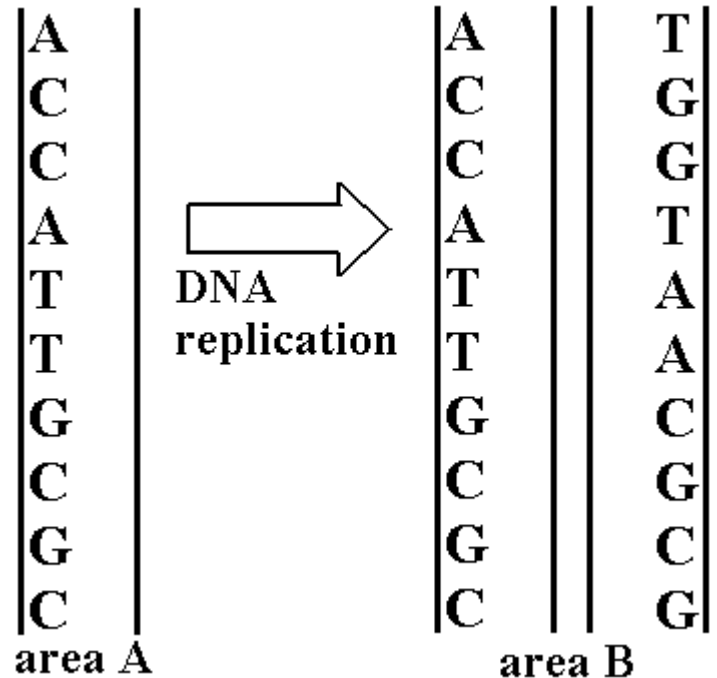
Review Lab Questions

- How many nucleotides are shown in the DNA segment pictured?
- Circle any **nucleotide** on the DNA segment.
- Name the **three parts** of a nucleotide.
 - _____
 - _____
 - _____
- Use the letters P and S to label the sugar and phosphate of the DNA molecule.
- Which part does the **phosphate** molecule connect with?



DNA Replication: Use your understanding of DNA replication to solve the questions below.

- The diagram below shows DNA replication.
 - In area A, **match the missing DNA bases from the strand given.**
 - In area B, **perform replication and fill in the two new strand of DNA.**
 - After filling in the correct DNA bases in area B, are the two strand of DNA identical?
 YES NO



- When does DNA replicate? _____

		<p>Key</p>	

