

DNA Structure & Replication Practice

Name _____

Biology

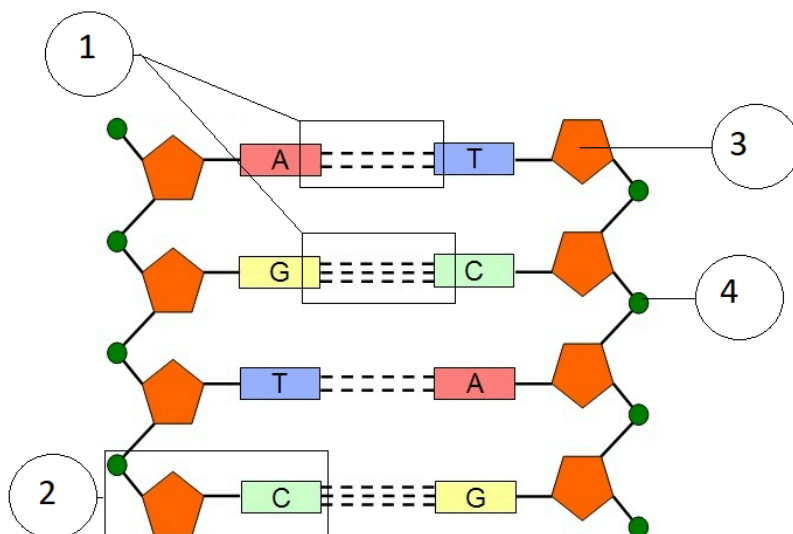
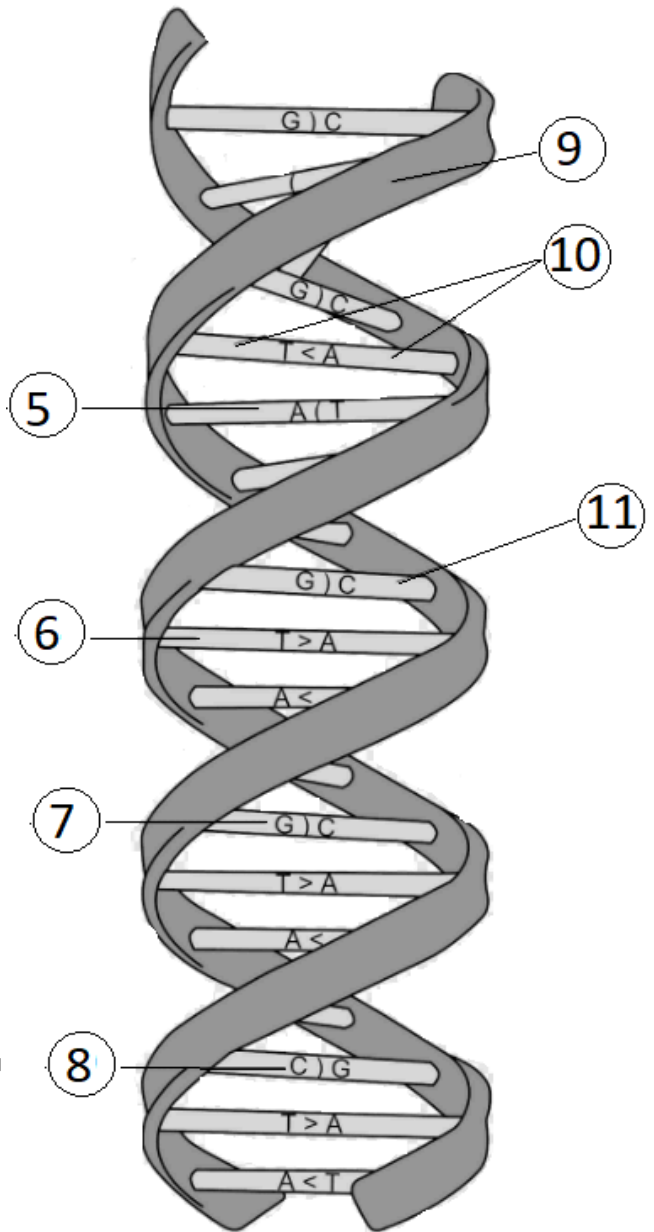
Date _____ Hour _____

1. Write the term that best identifies each part of the DNA model to the right. Use the following word bank:

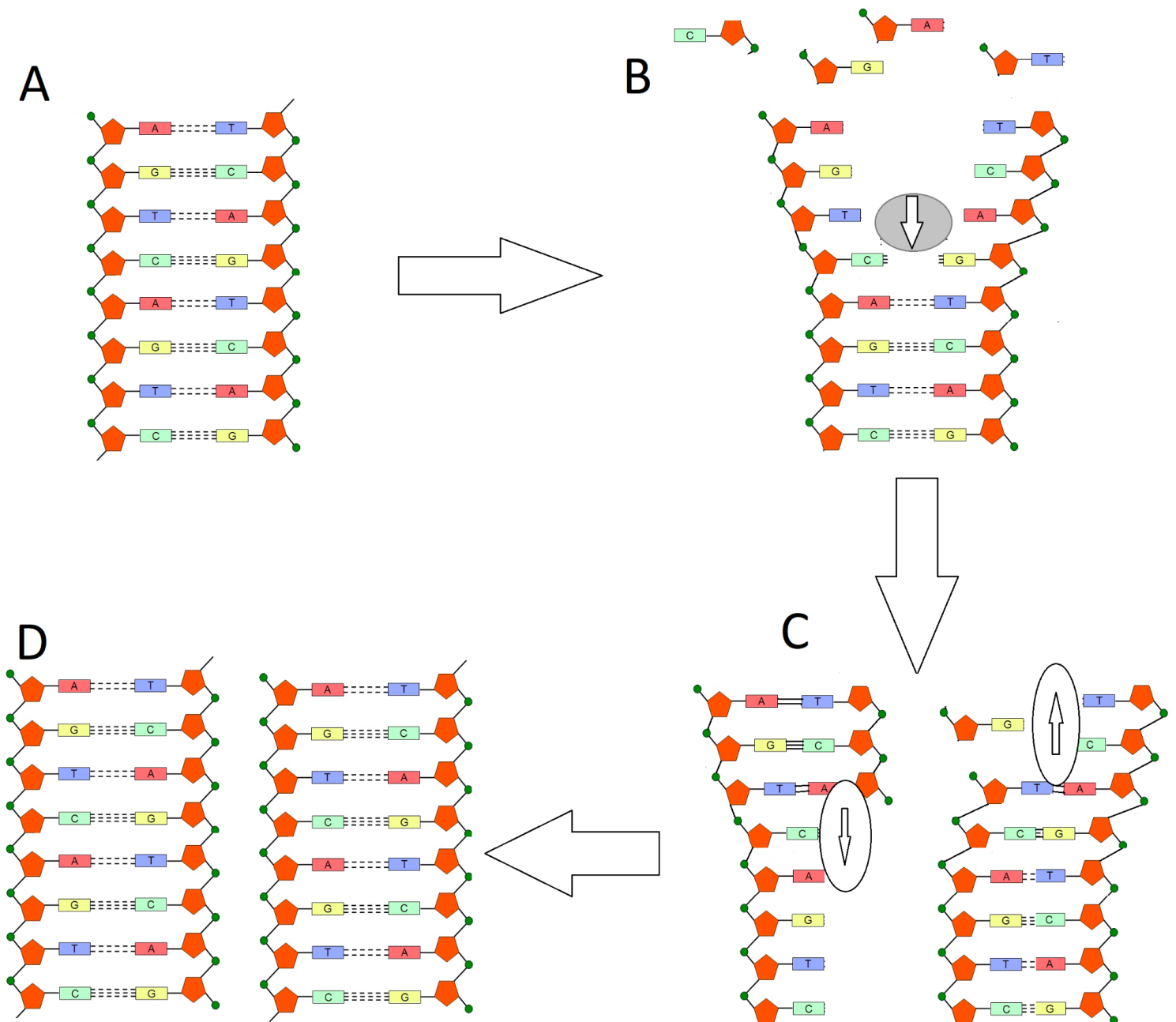
phosphate	cytosine	nitrogenous base	sugar/phosphate backbone
thymine	nucleotide	hydrogen bonds	deoxyribose sugar
guanine	adenine	base pair	

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

Use the image below to describe what it means to have two strands of DNA that are **antiparallel**.



- When does DNA replication occur? Be specific.
- Where do the nucleotides in step B come from?
- What is the name of the enzyme in step B called? What is its role?
- What is the name of the enzyme in step C called? What is its role?
- For each image below (A-D), write one sentence describing what is happening.



DNA & Genes Reinforcement

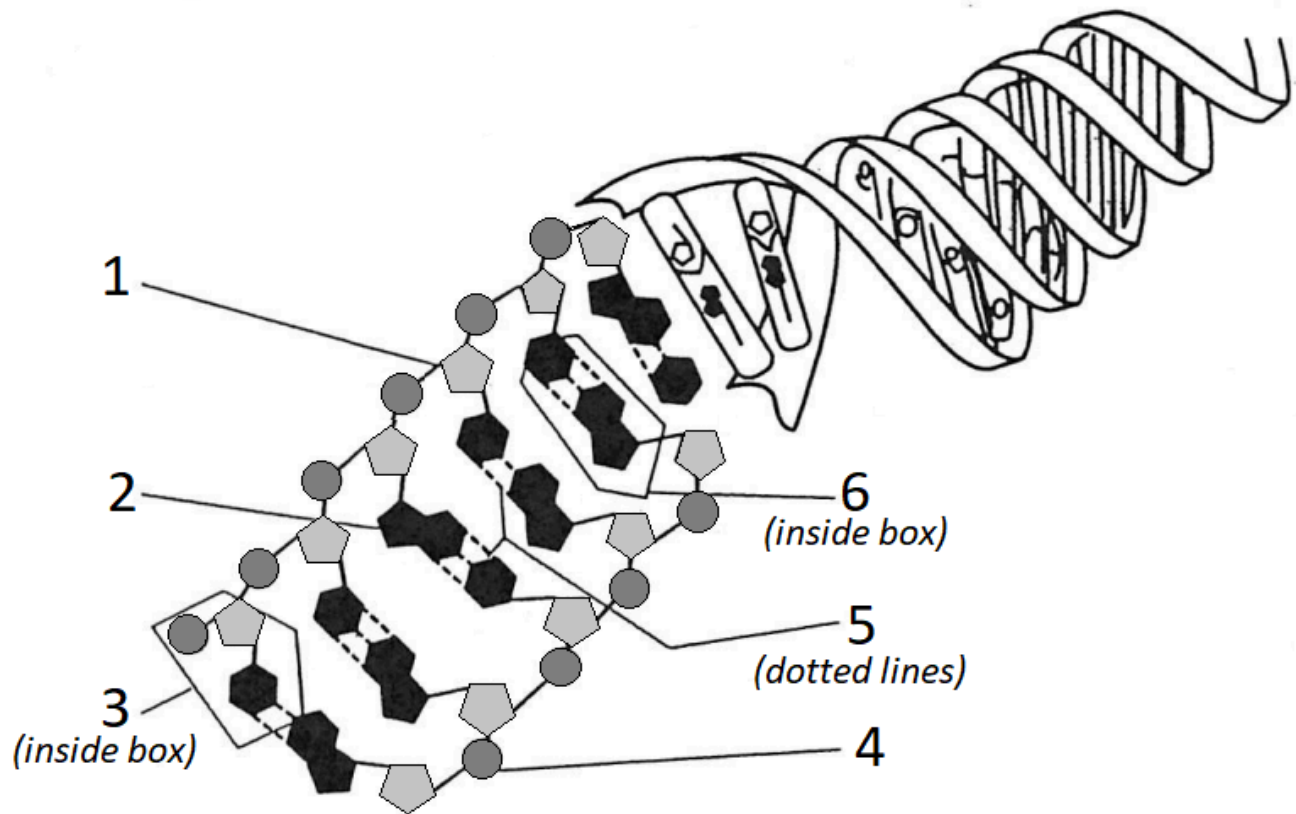
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Label the diagram below. Use the following choices:

nucleotide deoxyribose phosphate group nitrogenous base hydrogen bonds base pair



Complete each statement below. There is no word bank provided.

7. _____, guanine (G), cytosine (C), and thymine (T) are the four _____ in DNA.
8. In DNA, _____ always forms hydrogen bonds with guanine (G).
9. The sequence of _____ carries the genetic information of an organism.
10. The process of _____ produces a new copy of an organism's genetic information, which is passed on to a new cell.
11. The double-coiled shape of DNA is called a _____.
12. Write the complementary DNA strand for the following parent DNA code: A T T G C T A C