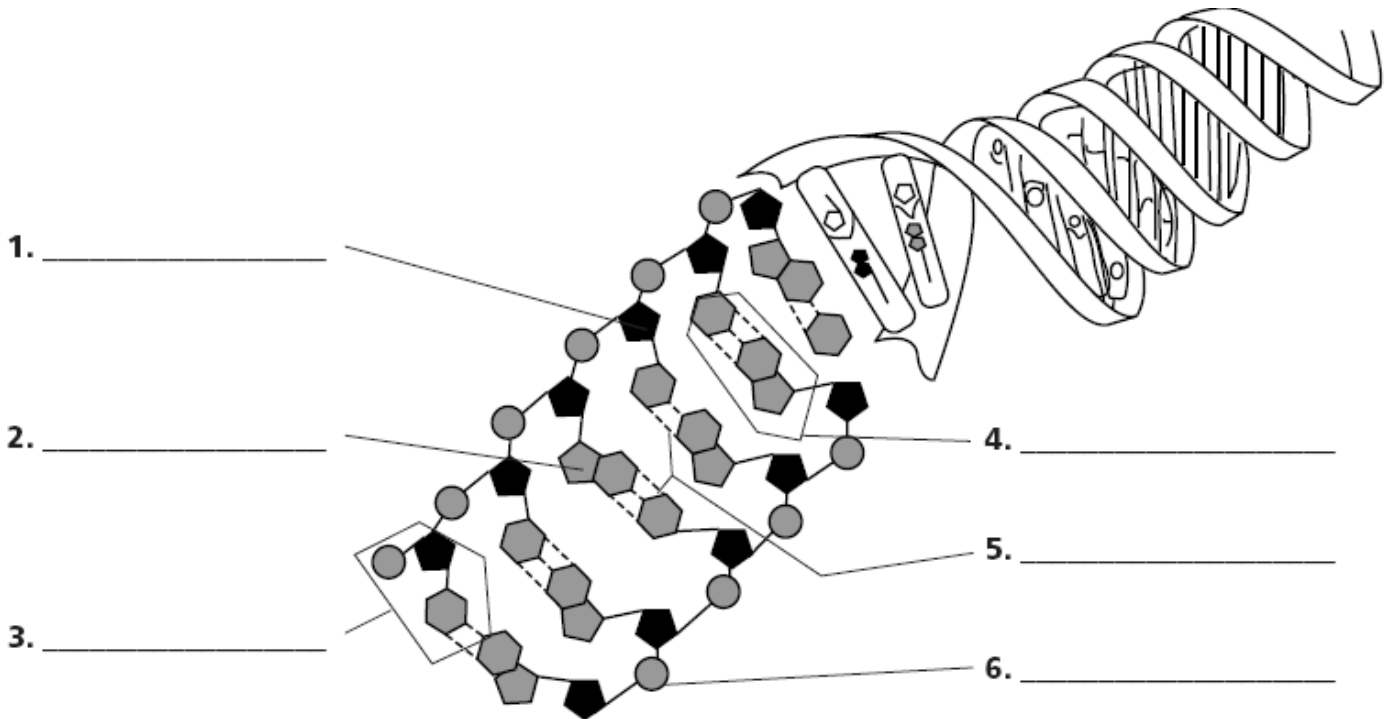


Label the diagram. Use these choices: *nucleotide, deoxyribose, phosphate group, nitrogen base, hydrogen bonds, base pair.*



Complete each statement.

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. Put the steps of DNA Replication in the correct order.

- _____ Spare nucleotides (in the nucleus of the cell) attach themselves to the 'broken rungs' to repair the break. Each repairing nucleotide is identical to the one broken.
- _____ As each 'broken rung' is repaired, two 'ladders' form, that is 2 identical strands of DNA. The 'repairing' is really the process of replication
- _____ The 2 bases forming each rung of the 'ladder' snap apart. This is caused by an enzyme that passes along the strands, 'unzipping' it.

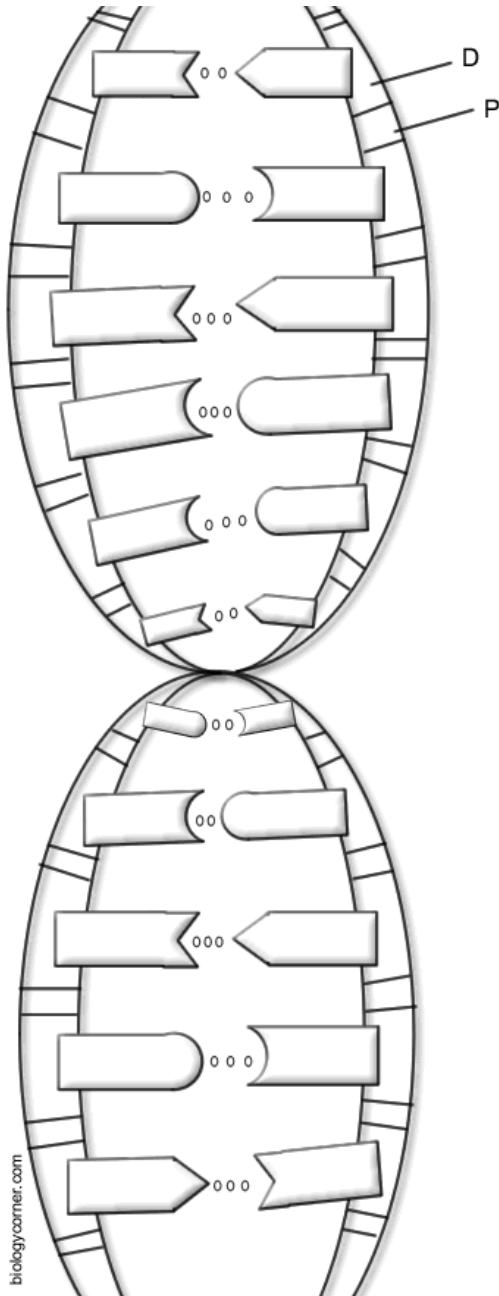
Color the thymines orange. 

Color the guanines purple. 

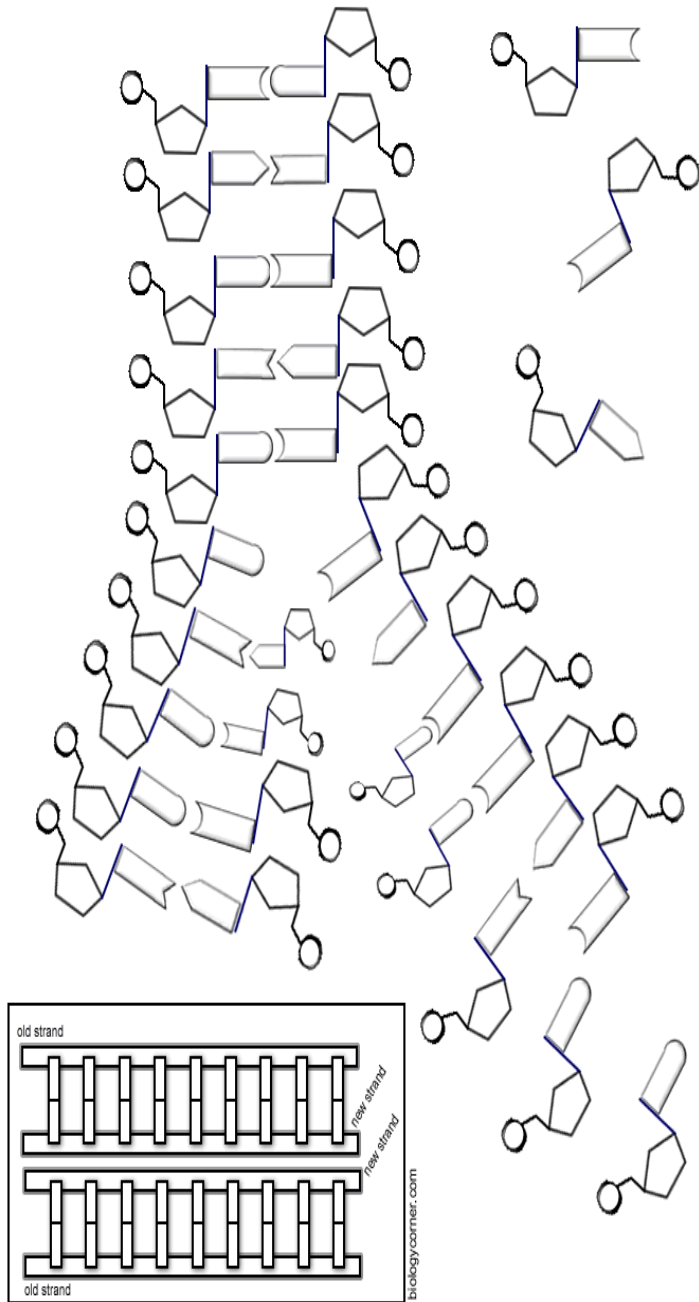
Color the adenines green. 

Color the cytosines yellow. 

DNA



REPLICATON



13. What is the goal of replication?

14. What type of bond is broken when the DNA becomes "unzipped?"

15. During DNA replication, what sequence on complementary base pairs will match to the following sequence: ATACGCGTTA