

NAME _____

DATE _____

M

DNA Labeling Worksheet

The shape of DNA is a double helix, which is like a twisted ladder. The sides of the ladder are made of alternating sugar and phosphate molecules. The sugar is deoxyribose.

1. Color all the phosphates **PINK** (one is labeled with a "P").
2. Color all the deoxyriboses **BLUE** (one is labeled with a "D").
3. Color the thymines **ORANGE**.



4. Color the adenines **GREEN**.



5. Color the guanines **PURPLE**.

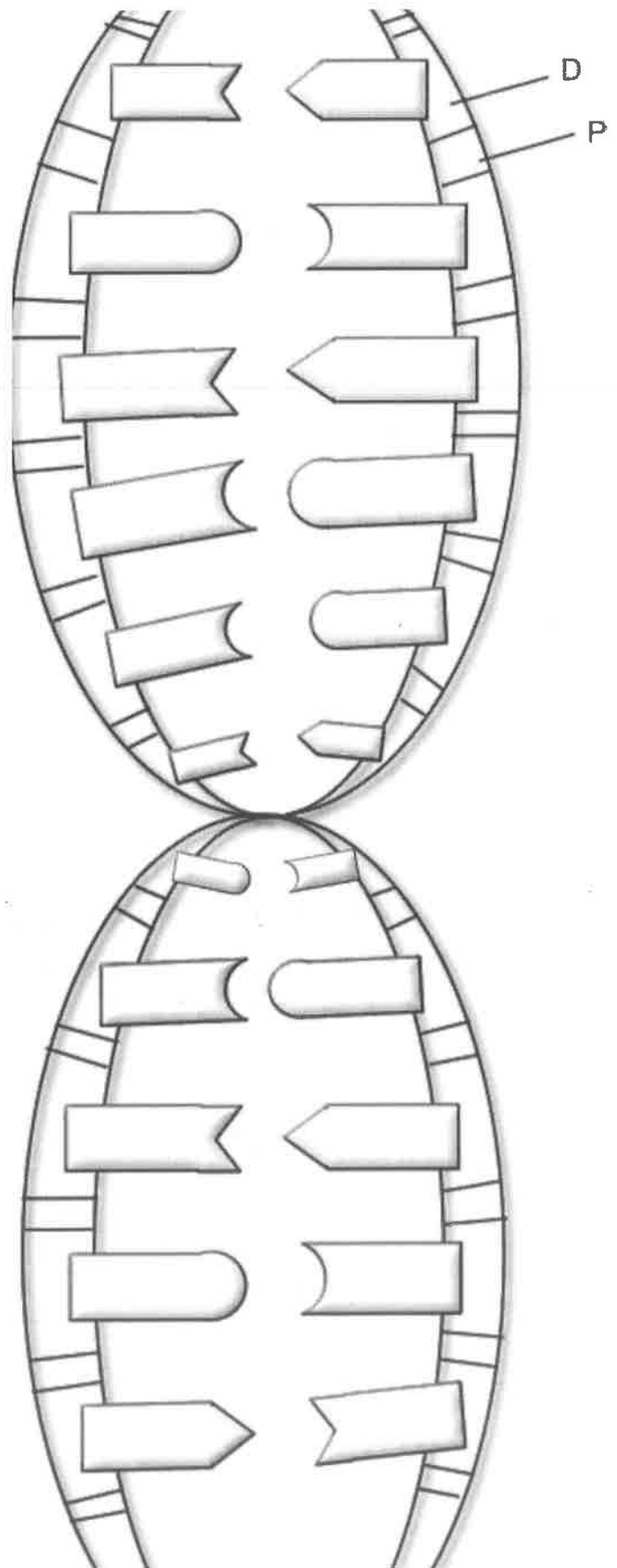


6. Color the cytosines **YELLOW**.

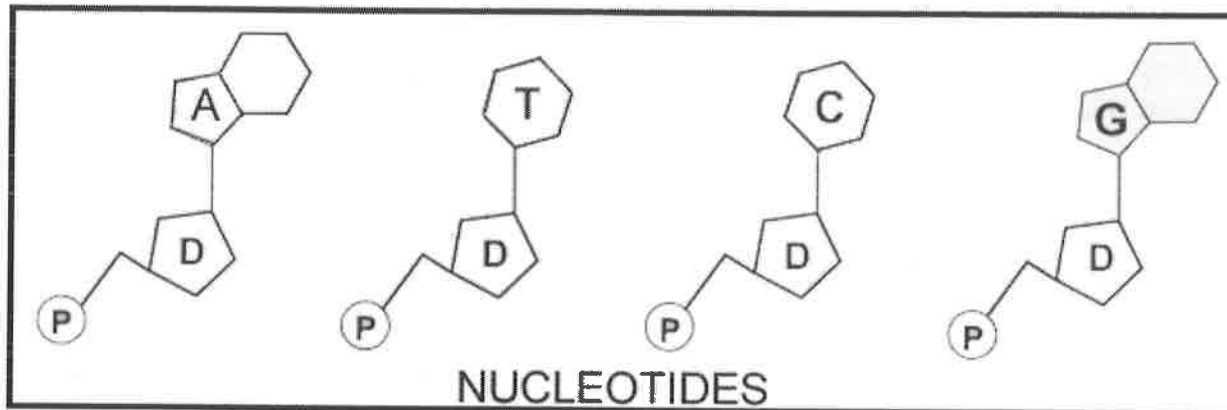


7. Draw the correct number of hydrogen bonds between each of the base pairs, then color the hydrogen bonds **GREY**.

**Note that that the bases attach to the sugars and not the phosphate.



Color the nucleotides below using the same colors as you colored them in the double helix.



1. Write out the full name for DNA _____
2. DNA can be found in what main organelle? _____
3. What is the shape of DNA? _____
4. DNA is made of repeating units of building blocks called _____.
5. A nucleotide is made of three parts:
 - a _____
 - a _____
 - and a _____ base.
6. What is the name of the sugar found in DNA? _____
7. In a single strand of DNA, the phosphate group binds to the _____ of the next group.
8. What are the "sides" of the DNA ladder made of? _____
9. What are the "rungs" of the DNA ladder made of? _____
10. In DNA, thymine is complementary to (or pairs with) _____; and cytosine is complementary to _____.
11. What type of bond connects the bases to each other?

12. Why is DNA called the "Blueprint of Life"?

DNA BASE PAIRS

