

Name: _____ HR: _____ Date: _____

Coloring DNA

Directions: Color the images according to the instructions and then use your notes, protein reading and protein worksheet to answer the following questions.

Color all the phosphates pink (one is labeled with a "p").

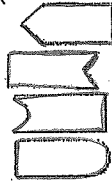
Color all the deoxyriboses blue (one is labeled with a "D").

Color the thymines orange.

Color the adenines green.

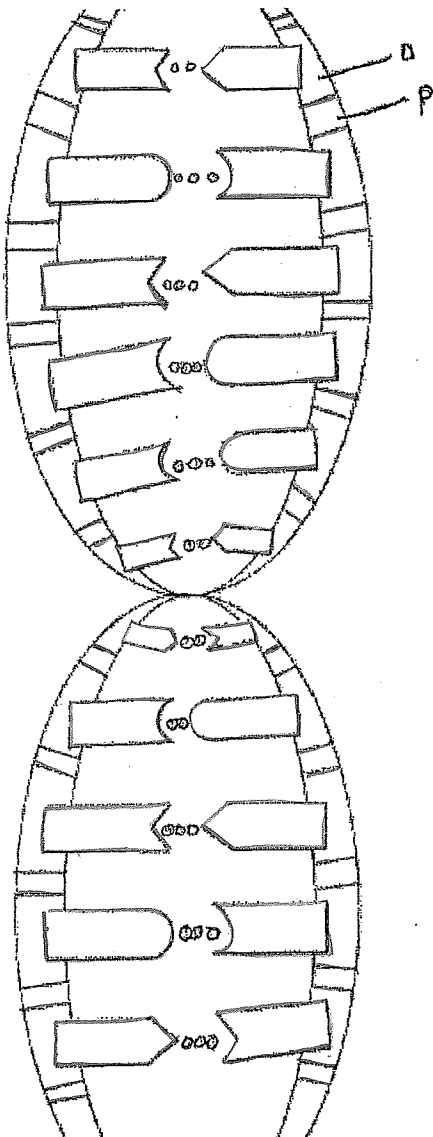
Color the guanines purple.

Color the cytosines yellow.

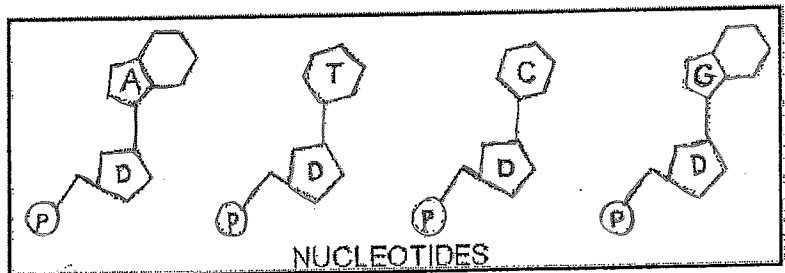
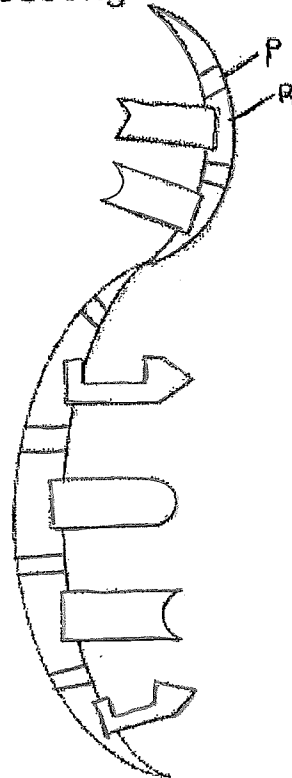


Color the hydrogen bonds grey.

Color the mRNA as you did the DNA, except: Color the ribose a DARKER BLUE, and the uracil brown.



Messenger RNA



1. Write the entire name of DNA.
2. What is a gene?
3. Where in the cell are chromosomes located?
4. DNA can be found in what organelle?
6. What is the shape of DNA?
7. What are the sides of the DNA ladder made of? What are the sides of the RNA made of?
8. What are the "rungs" of the DNA ladder made of?
9. What sugar is found in DNA? _____ In RNA? _____
10. How do the bases bond together in DNA? A bonds with _____ G bonds with _____
How do the bases bond together in the RNA? A bonds with _____ G bonds with _____
11. What base is replaced with uracil in the RNA strand?
12. DNA is made of repeating **units** called what? What are these repeating units called in RNA?
13. Why is RNA necessary to act as a messenger? Why can't the code be taken directly from the DNA?
14. Proteins are made where in the cell?
15. Explain the job of the mRNA?
16. Explain the job of the tRNA?