

Name: _____

Date: _____ Hour: _____

1. Describe the overall shape of DNA: _____

2. What 3 parts is a nucleotide composed of?

3. What are the 4 nitrogen bases of DNA? (Give the full names.)

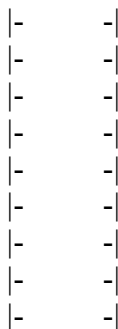
4. In what 3 ways does the structure of RNA differ from DNA?

RNA	DNA

5. What are the 4 nitrogen bases of RNA? (Give the full names and symbols)

6. What are the 4 nitrogen bases of DNA? (Give the full names and symbols)

7. Make a DNA molecule that is 9 nucleotides long.
Diagram:

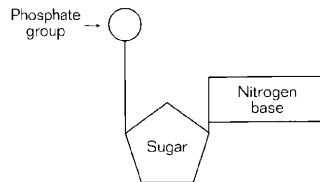


8. Each organism has a unique combination of characteristics encoded in molecules of _____.

9. Who is given credit for discovering the structure of DNA? _____

10. The scientists who were credited with discovering DNA's structure used another researcher's X-ray image and careful measurements without permission. Who was this other scientist?

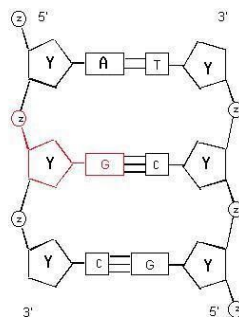
11. What is primary function of DNA? _____



12. Refer to the illustration above. The entire molecule shown in the diagram is called a(n):

13. What holds the base pairs and the two sides of the helix together in a strand of DNA? _____

Use the diagram below to answer questions 14-17.



14. The structures labeled Y in the diagram are the:

15. The structures labeled Z in the diagram are the:

16. The structures labeled A, T, C, and G in the diagram are the:

17. The lines between A and T and between C and G represent: