

# Biology I

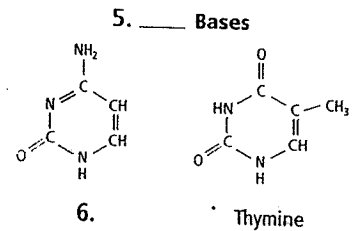
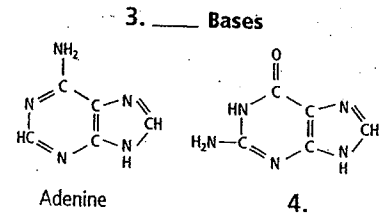
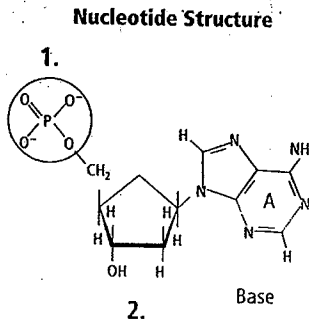
## DNA

### Practice Sheet

Label the diagrams of DNA nucleotides and bases. Use these choices:

cytosine      guanine      phosphate      purine      pyrimidine      sugar

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_



In your textbook, read about DNA structure.

Write the term or phrase that best completes each statement. Use these choices:

adenine (A)	chromosome	cytosine	double helix
double-ring	genetic material	nitrogenous bases	nucleic acids
nucleotides	purine	single-ring	

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. Chargaff's data states that the number of \_\_\_\_\_ bases equals the number of pyrimidine bases in DNA.
11. The twisted ladder shape of DNA is called a \_\_\_\_\_.
12. DNA is the \_\_\_\_\_ of all organisms.
13. The pyrimidine bases have a \_\_\_\_\_ structure.
14. The purine bases have a \_\_\_\_\_ structure.
15. DNA and RNA are the two \_\_\_\_\_ found in living cells.
16. DNA supercoils to make up the structure known as a \_\_\_\_\_.

**Complete** the table below about geneticists and their discoveries.

Scientist	Discovery	Year
Fredrick Griffith		
Oswald Avery		
Alfred Hershey and Martha Chase		
James Watson and Francis Crick		

**Analyze** the DNA molecule by explaining how each word applies to the molecule. Use a sketch to back up your explanation in each case.

Word and What It Means	Sketch of Effect
complementary:	
helix:	
double (as in "double helix"):	