



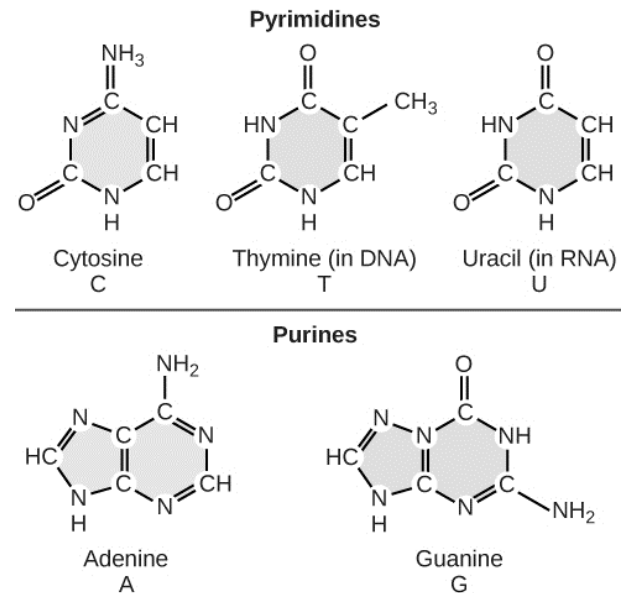
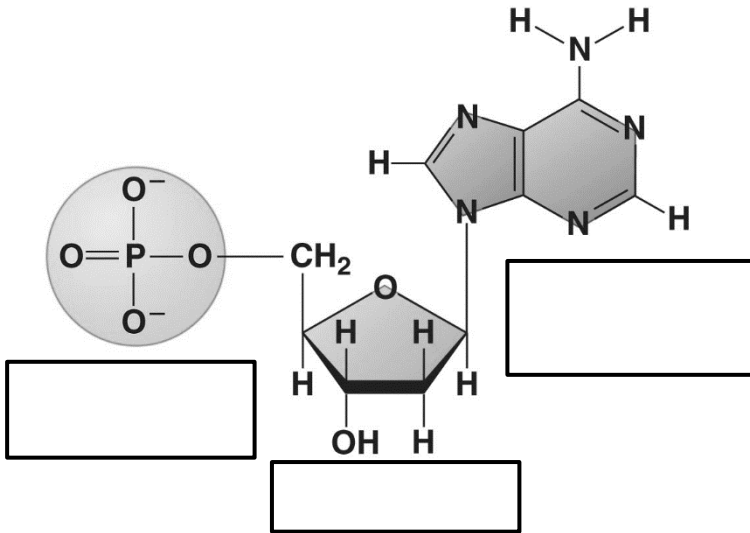
# The Structure of DNA



## Structure and Base Pairing of DNA Notes

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

- DNA is a long molecule made up of units called: \_\_\_\_\_ The monomer of :
  - Carbohydrates
  - Nucleic Acids
  - Lipids
  - Proteins
- Label** below the three basic parts of a nucleotide:

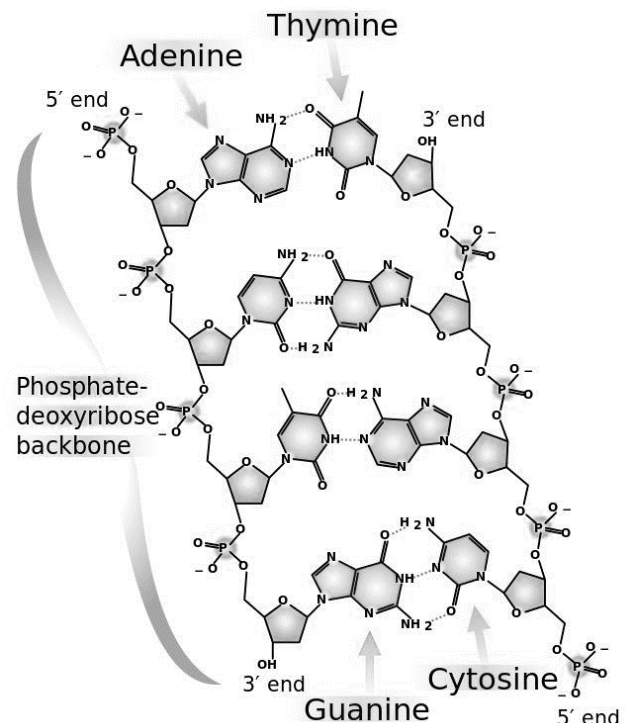


- In regards to structure, what is the difference between **purines** and **pyrimidines**?
- What **two** bases are **purines**?
- What **two** bases are **pyrimidines**?
- Every **purine bonds** with a what, and vice versa.
- The **backbone** of the DNA chain is formed by what?
- How do the **nitrogenous bases stick from the backbone** chain?
- Who discovered that the percentage of guanine and cytosine were **equal in any sample of DNA**?

a. Rosalind Franklin

b. Erwin Chargaff

c. Avery Oswald



10. In 1950, who studied DNA using **x-ray diffraction**?

11. **Rosalind Franklin** took a picture of something very significant in the science world that contributed to the knowledge of DNA, what was it?

12. What **two scientist** ultimately got credit for Franklin's work? **What was their contributions to science?**

13. In 1958 Franklin passed away, what did she die from, and what was the speculation of the cause of this disease?

14. A \_\_\_\_\_ looks like a twisted staircase. The \_\_\_\_\_ and \_\_\_\_\_ make up the backbone and the nitrogenous bases make the "**rungs**" of the ladder.

15. What is the **bond between the bases** called? \_\_\_\_\_

