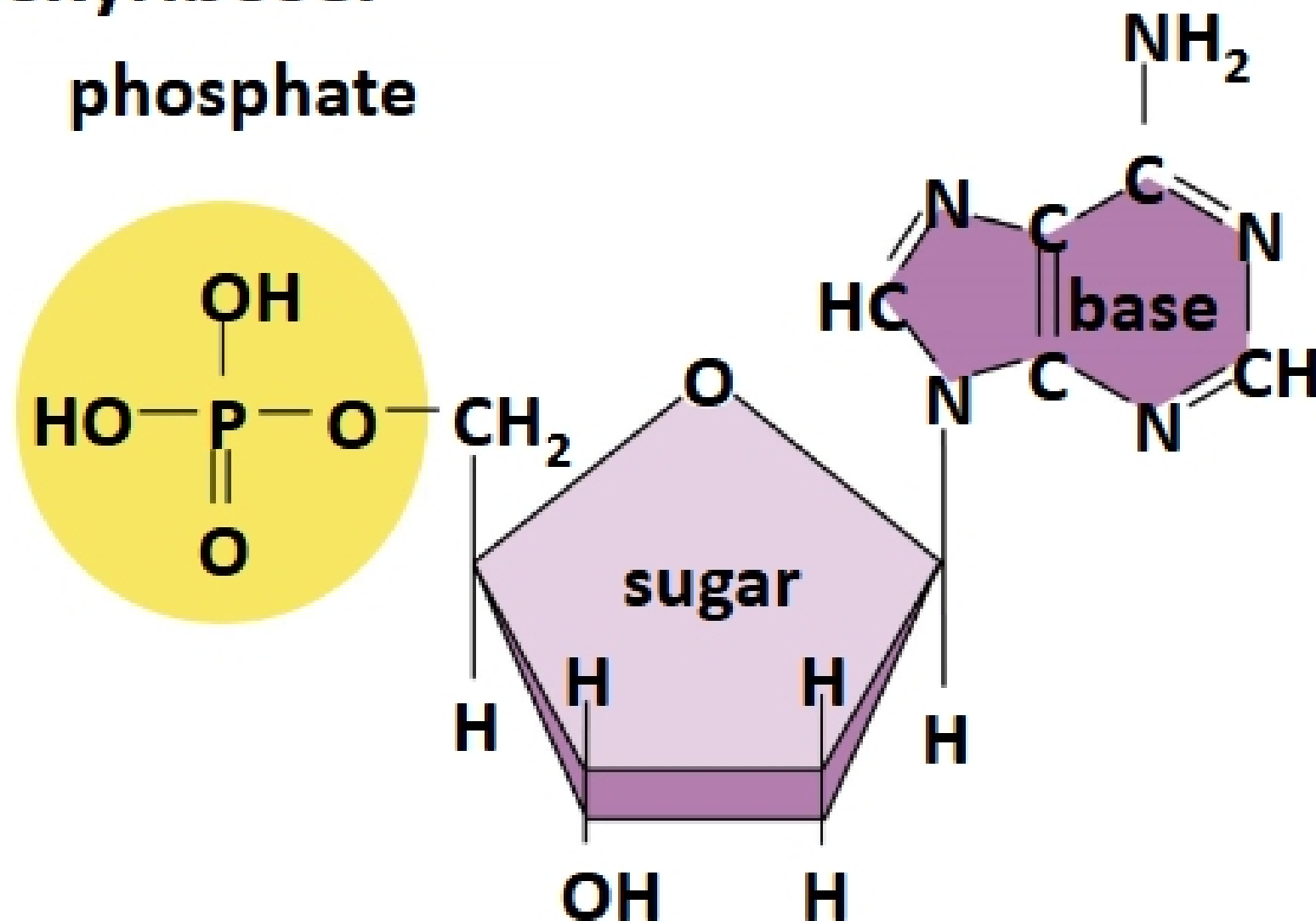


# DNA and Chromosomes

**Nucleotides** are composed of a base, sugar, and phosphate group.

- In **deoxyribonucleic acid (DNA)**, the sugar is **deoxyribose**.



- **Nucleotides** are linked via **phosphodiester bonds** to form **nucleic acids**

- phosphodiester bonds form via condensation reactions

- DNA nucleotides can be **purines (G/A)** or **pyrimidines (T/C)**
- DNA strands have a **polarity** (5' versus 3')
- DNA strands are **negatively** charged

