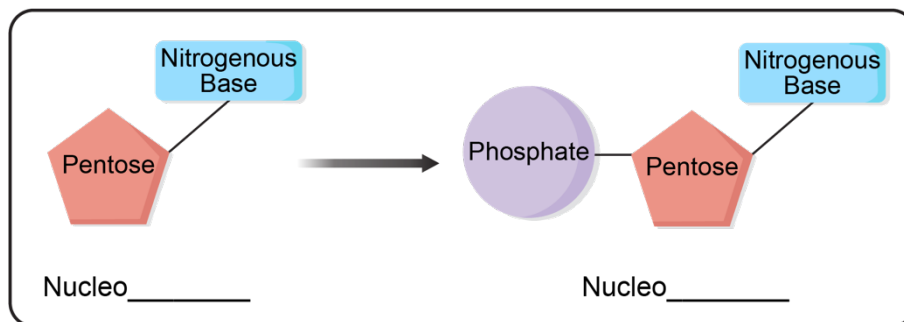


## CONCEPT: INTRO TO NUCLEIC ACIDS

- **Nucleotide:** \_\_\_\_\_ of nucleic acid.
- **Nucleic Acid:** polymer of *nucleotides* that store & encode \_\_\_\_\_ information; consists of 2 types.
  - **DNA** (deoxyribonucleic acid): \_\_\_\_\_ genetic info of cellular organisms.
  - **RNA** (ribonucleic acid): \_\_\_\_\_ genetic info from DNA to create proteins.

### Components of Nucleotides

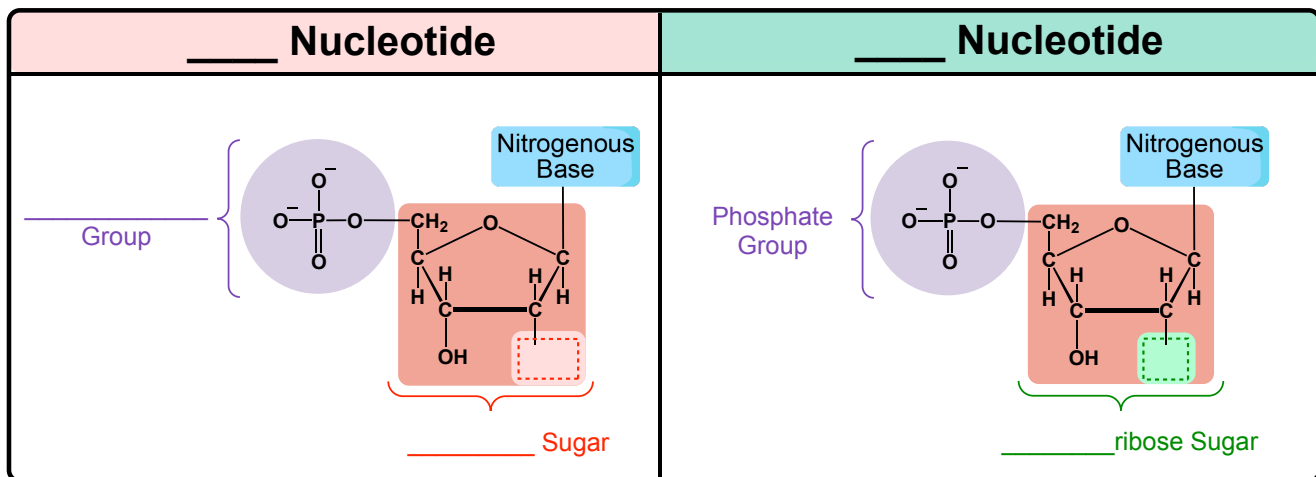
- **Nucleoside:** precursor of nucleotide, consists of (1) \_\_\_\_\_ sugar and (2) Nitrogenous \_\_\_\_\_.
- **Nucleotide** consists of a Nucleoside and a \_\_\_\_\_ group.



### RNA vs DNA Nucleotides

- Pentose sugar in RNA is \_\_\_\_\_ while in DNA is 2-\_\_\_\_\_ ribose.

**Terminology Tip:**  
**Deoxy:** means without oxygen.



**EXAMPLE:** Select correct statement describing nucleotides.

- The sugar in DNA has an extra -OH group than the sugar in RNA.
- All nucleotides contain a nitrogenous base.
- The sugar in DNA contains one less carbonyl group than the sugar in RNA.
- All nucleotides contain a ribose sugar.