

DNA is a nucleic acid.

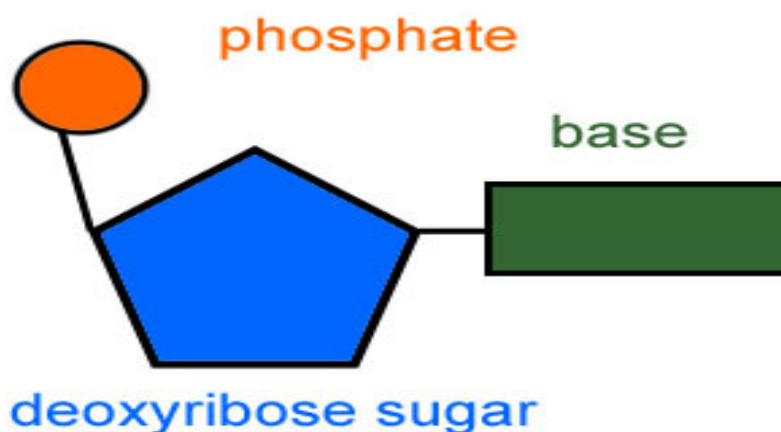
DNA stands for deoxyribonucleic acid

DNA is genetic material.

It is found in the nucleus of the cell.

DNA is made up of nucleotides.

A nucleotide consists of a sugar, a phosphate, and a base.



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The nucleotides fit together to form a twisted ladder shape called a **double helix**.



The hand rails of the ladder are made of **sugar** (deoxyribose) and **phosphate** molecules.

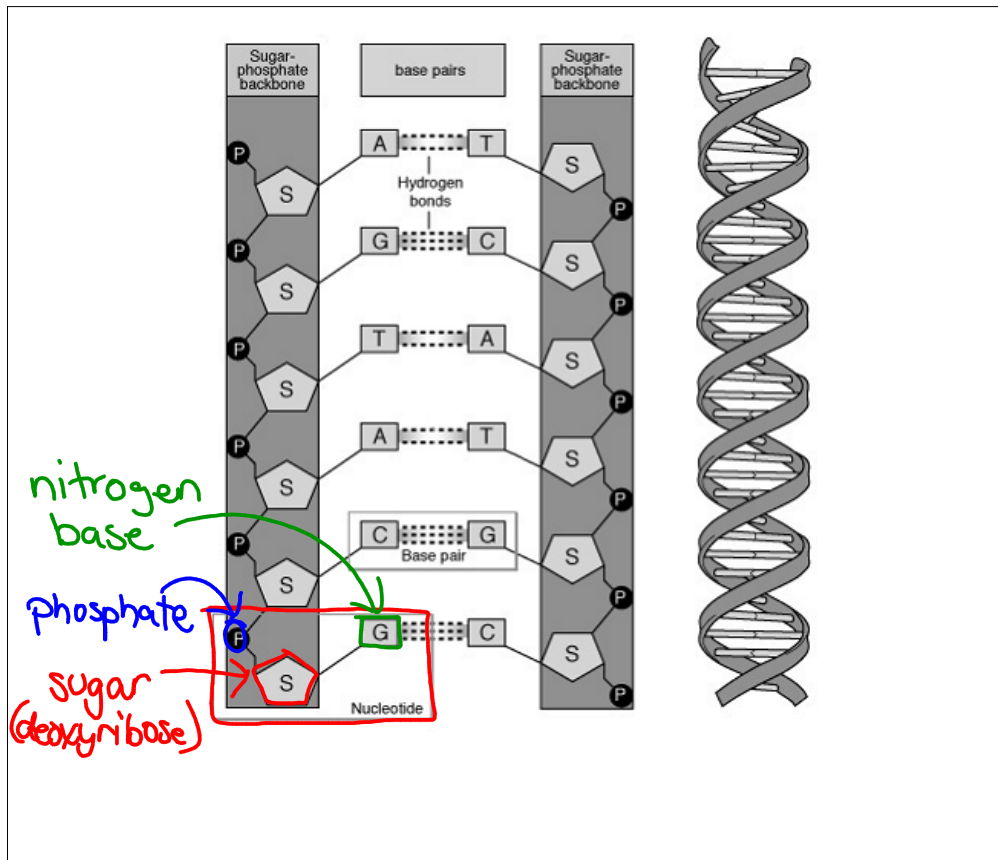
The steps of the ladder are made up of **nitrogen bases** (A,T,C,G).

A- **Adenine**

T- **Thymine**

C- **Cytosine**

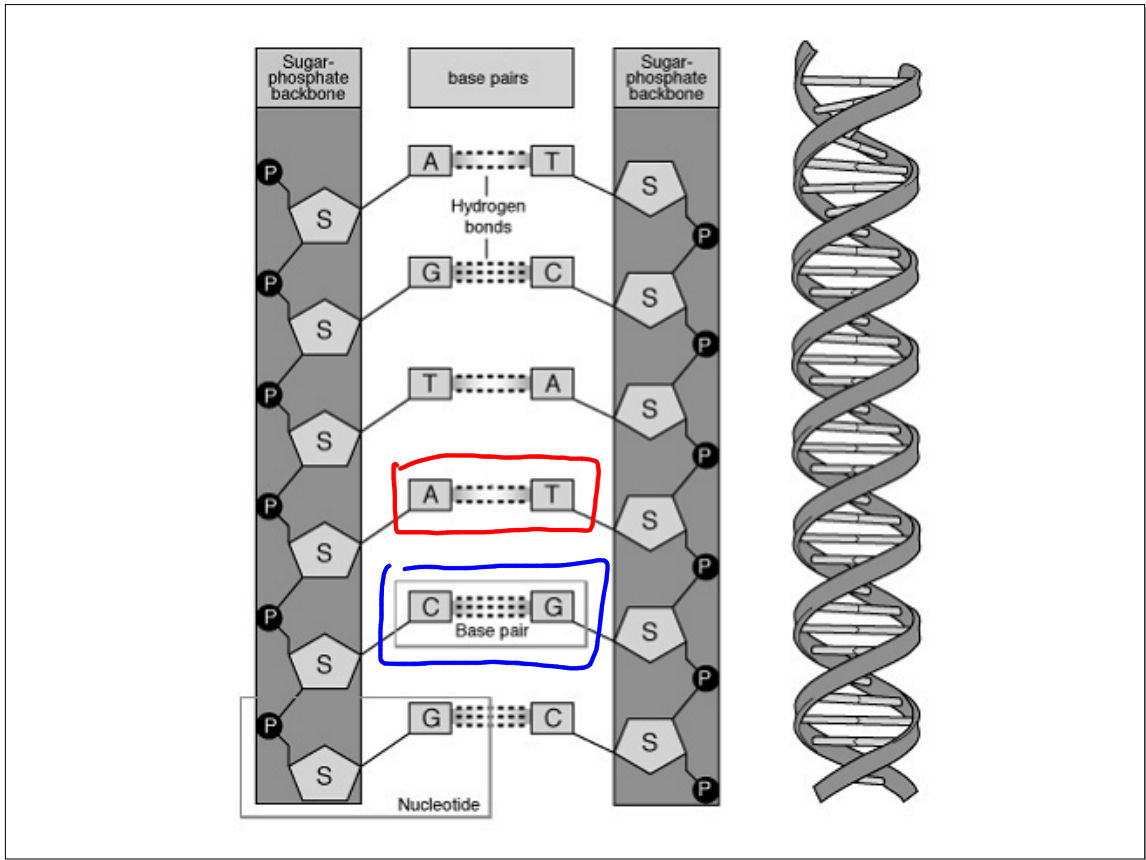
G- **Guanine**



The bases are complimentary.

Adenine (A) always comes with Thymine (T).

Cytosine (C) always comes with Guanine (G).



If one side of a DNA molecule has this base sequence: ATGCCGT,

TACGGCA

what sequence of bases would the complimentary side have?

DNA replication is the process of making a copy of DNA.

In DNA replication, the DNA molecule unwinds and the two sides split apart. Then, new nucleotides are added to each side until two identical sequences result.

