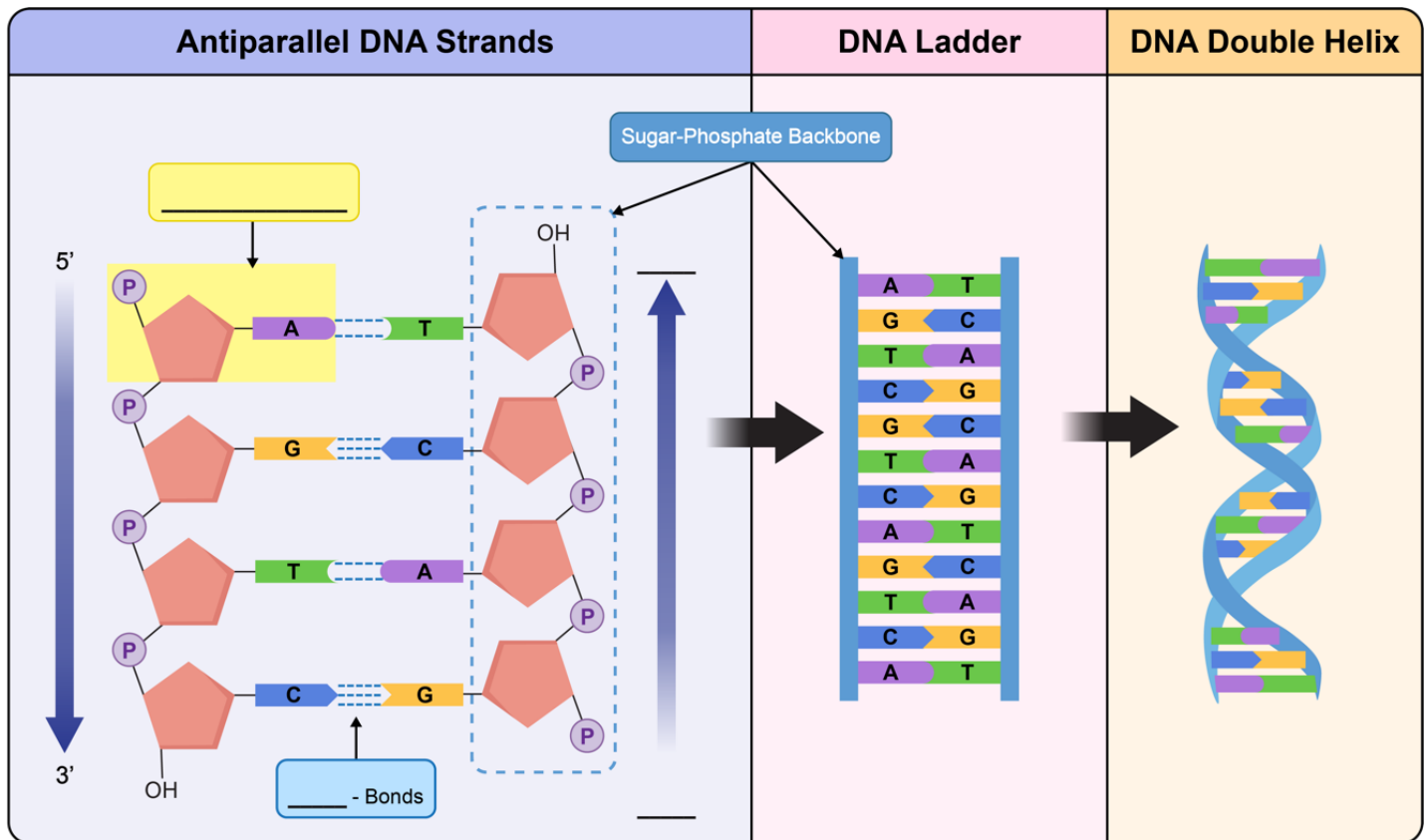


CONCEPT: DNA DOUBLE HELIX

- Rosalind Franklin, James Watson & Francis Crick are credited with helping to describe the structure of _____.
- _____ -helix with _____ *anti-parallel* strands of nucleotides.
 - **Anti-parallel:** 2 strands that run parallel to each other but with _____ directions.
- Double helix resembles a _____ ladder: phosphate-sugar backbone on the sides and bases _____.



EXAMPLE: Predict the sequence of bases in the DNA strand that is complementary to the DNA strand shown below:

5' C—G—A—A—A—C—T—C—C—T—A 3'
3' _ _ _ _ _ _ _ _ _ _ 5'

PRACTICE: Which of the following statements is false?

- The nitrogenous bases extend inward within the double helix.
- The two polynucleotide strands in the DNA double helix are identical to one another.
- Hydrogen bonding occurs between the two polynucleotide strands within DNA.
- The complementary strand of DNA segment of 5' GCATTCAT 3' would be 3' CGTAAGTA 5'.
- Phosphate groups and sugars form the backbone of the DNA double helix.