

Notes – DNA Structure

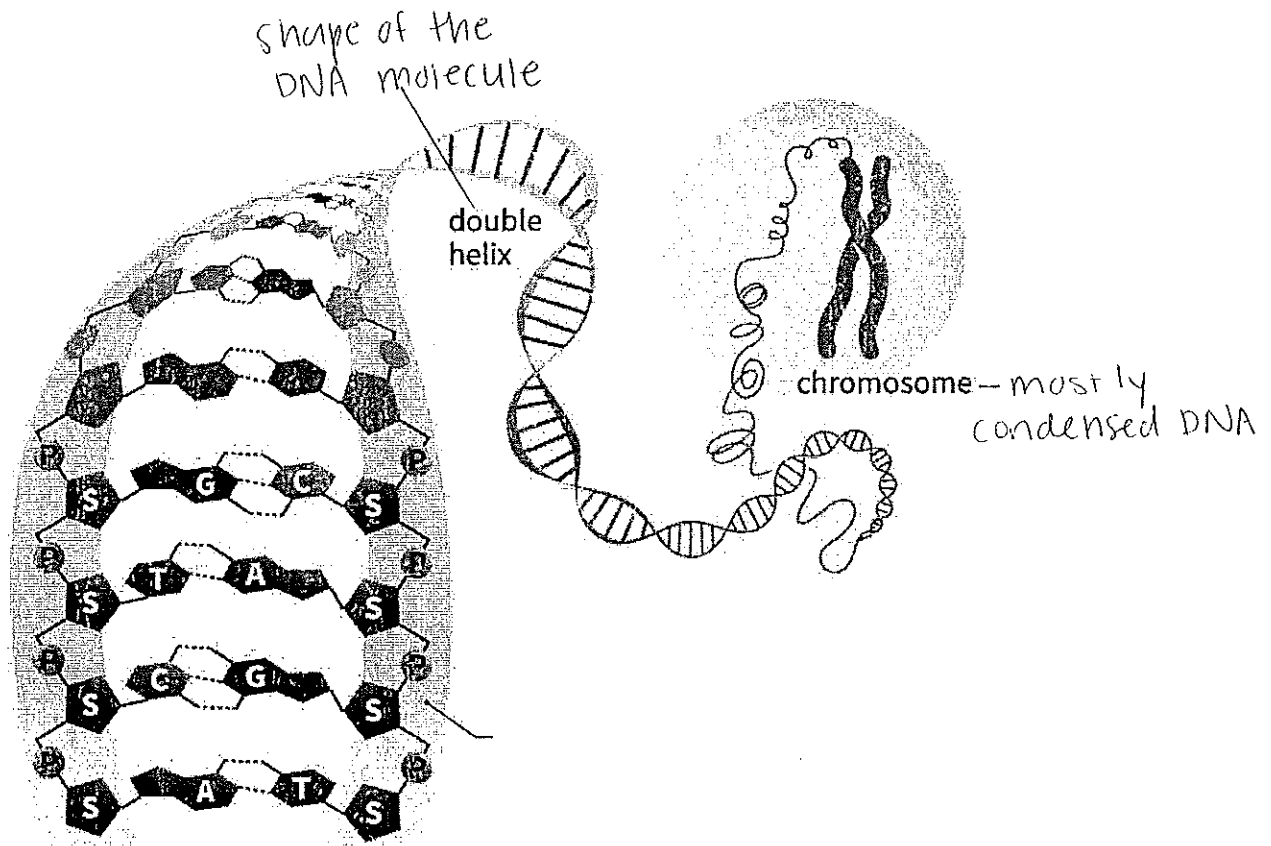
DNA structure is important because it holds genetic info (genes)

- molecule of heredity - how traits are passed from parent to offspring
- controls all cell functions - holds instructions for making proteins

The 2 most important features of the DNA molecule are:

- double stranded - easy to copy
- opposite strands are complimentary (A-T) (C-G)

↑
complimentary base pairing

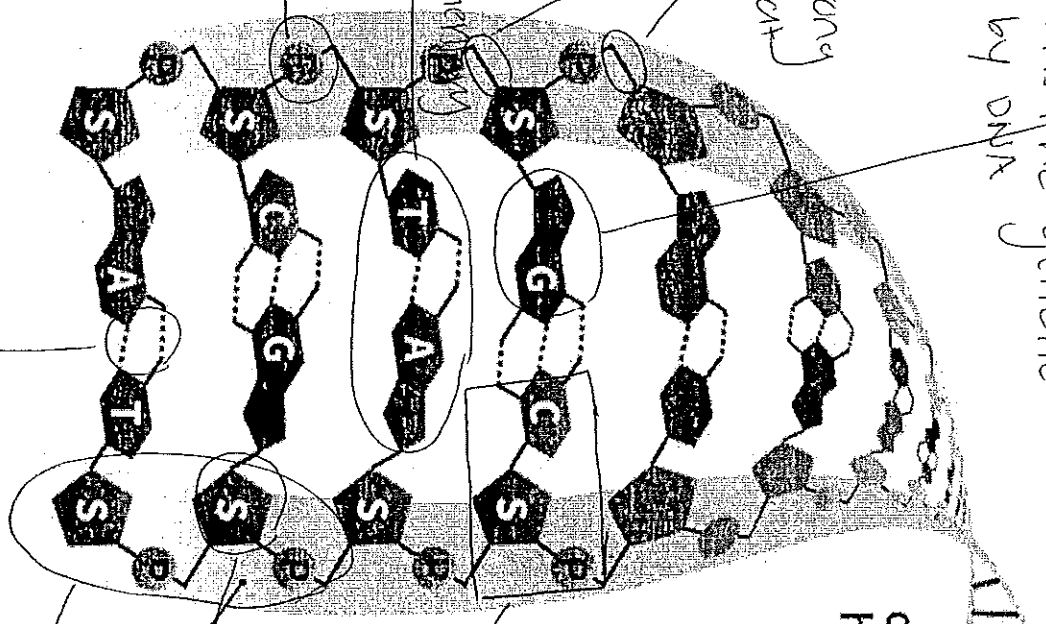


nitrogenous base - the order of the sequence of these contains the genetic info stored by DNA

covalent bonds - strong chemical bonds that hold DNA's backbone together

base pair - complementary pair of bases
A-T, C-G

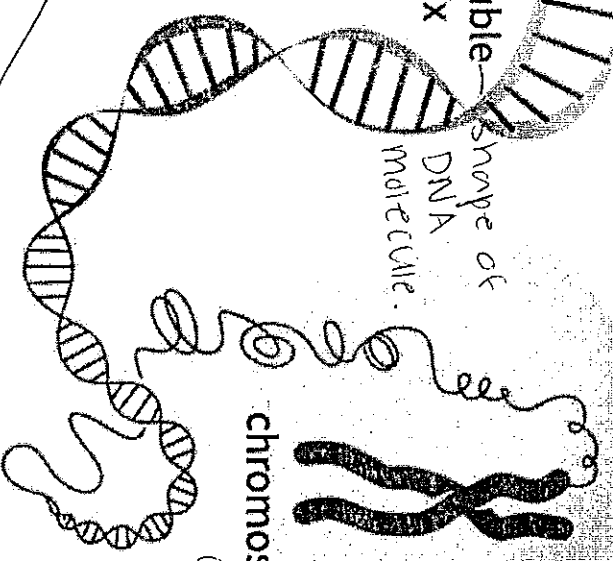
phosphate group - connected to sugar backbone.



hydrogen bonds - weak chemical bonds between the nitrogen base pairs

double-helix

shape of DNA molecule.



chromosome - most highly condensed DNA

nucleotide - DNA monomer includes a sugar, phosphate, and base.

deoxyribose - sugar in backbone of DNA

sugar-phosphate backbone - strong outside part of DNA; does not contain information.