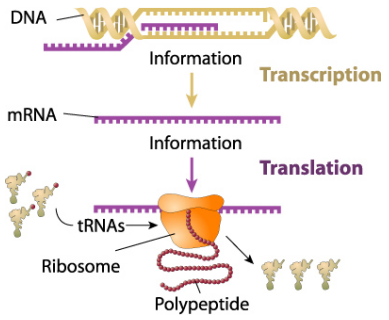
Protein Synthesis

Structure and Properties of DNA and Genes

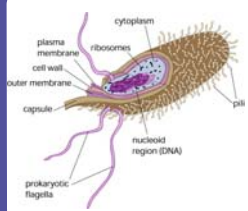
University of Idaho

Start Audio Lecture!

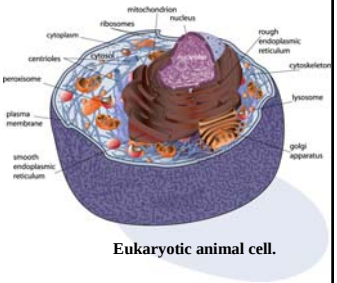
DNA: The Recipe for Life



DNA Is Found in All Living Cells

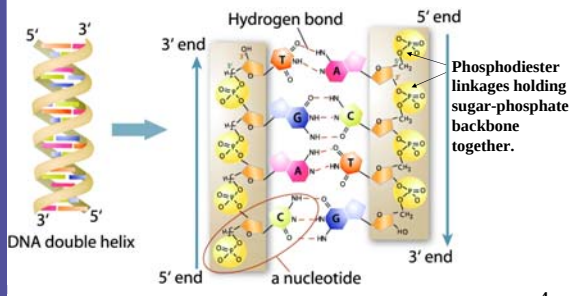


Typical prokaryotic cell.



Eukaryotic animal cell.

The DNA Double Helix



Phosphodiester linkages holding sugar-phosphate backbone together.

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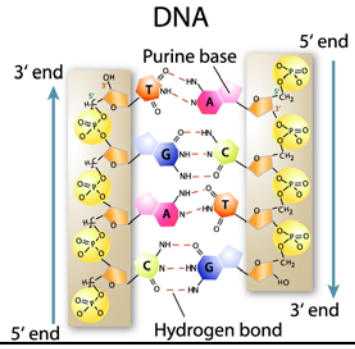
Hydrogen Bonding In DNA



Hydrogen bonds form between complementary bases to hold the two separate strands of DNA together.

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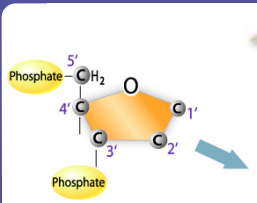
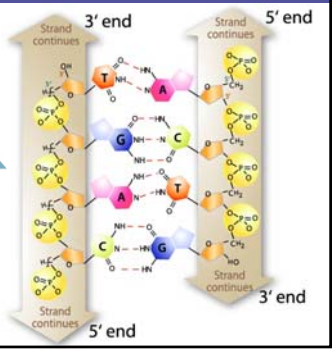
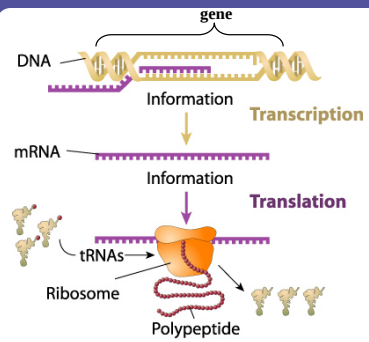
DNA: Antiparallel Strands



Carbon numbers of deoxyribose.



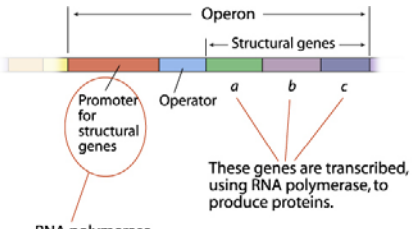
Genes: DNA That Codes for Protein



Genes are segments of DNA that are used to make proteins, through the processes of transcription and translation.

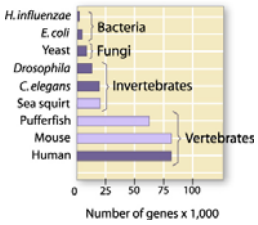
DNA: Gene Regulatory Sequences

An example of prokaryotic gene organization.



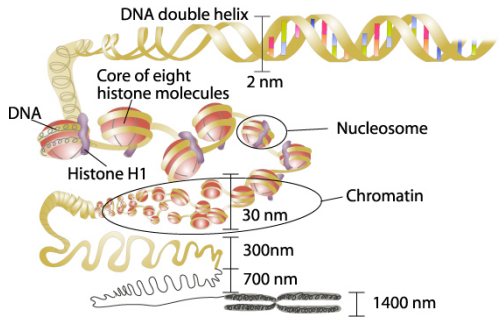
How Much DNA Do Cells Have?

Genome size in different organisms.



Estimated number of genes in different organisms.

The Packaging of DNA



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