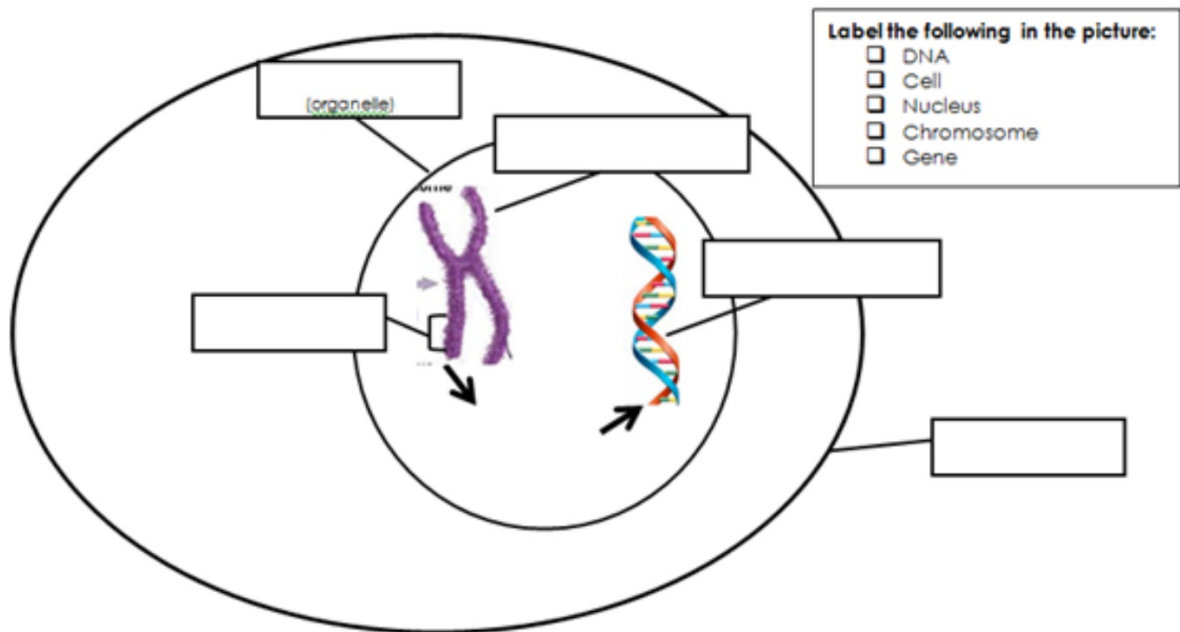


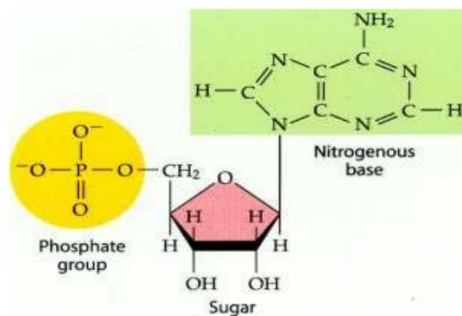
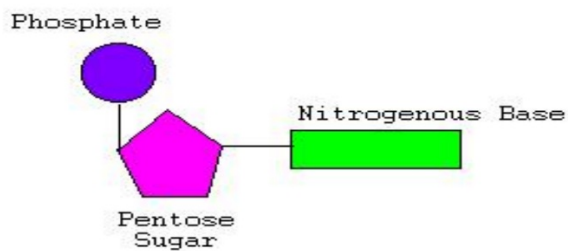
Where in the cell is DNA?!



Goal 3.1.1 - DNA

DNA

- Deoxyribonucleic Acid
- Is a type of nucleic acid
- What chromosomes (and genes) are made of
- Made up of repeating nucleotide subunits
- 1 Nucleotide looks like:

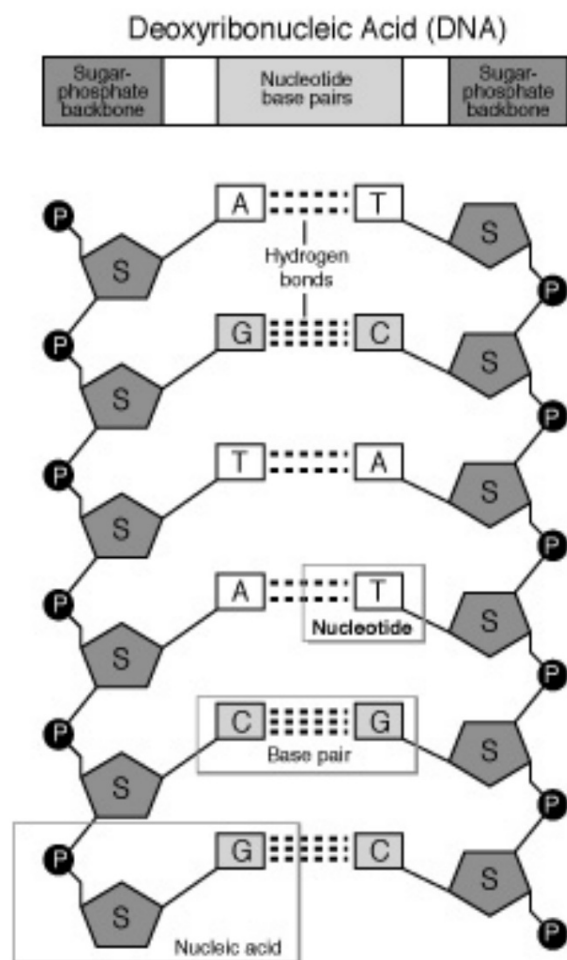


4 Types of Bases:

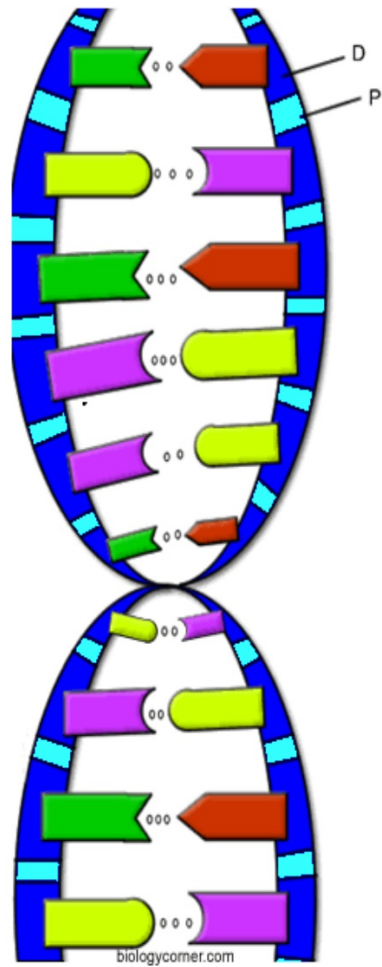
- Adenine (A)
- Guanine (G)
- Cytosine (C)
- Thymine (T)

Complementary Base Pairs:

- A binds with T only
- C binds with G only



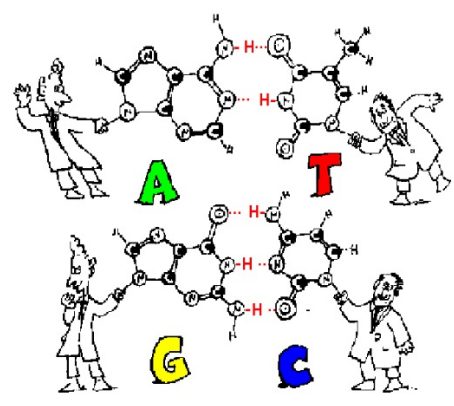
Phosphates
and sugars
on the
outside



- Thymine
- Adenine
- Guanine
- Cytosine
- D = Deoxyribose (sugar)
- P = Phosphate
- Hydrogen Bond

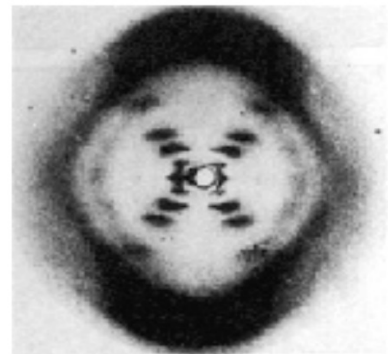
Bases on
the inside
(bases fit
like puzzle
pieces)

http://www.youtube.com/watch?v=BmDG_fkUTR8



Shape is a DOUBLE HELIX

- Double Helix: 2 spirals wound around each other
- Rosalind Franklin took an X-ray photo of DNA
- James Watson and Francis Crick interpreted the photo and discovered the double helix structure (they won the Nobel Prize)

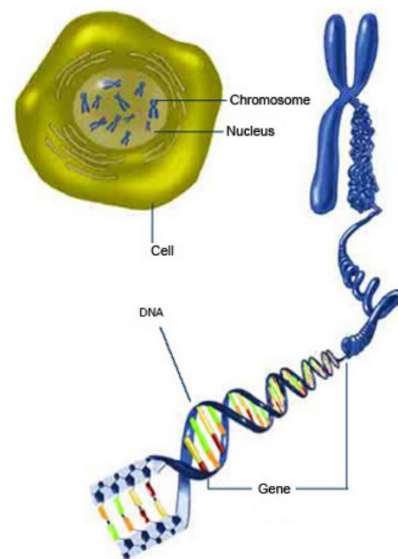


Codon: Group of 3 Bases
ex: ACT, CGA, GAA

Genes: stretch of DNA that codes for traits

-The code is the order of the bases (letters)

-Genes are hundreds or thousands of bases long





Ex: Eye Color Gene, Dimples Gene, Hair Color Gene


<http://www.youtube.com/watch?v=qy8dk5iS1f0>


<http://www.brainpop.com/science/cellular-lifeandgenetics/dna/>

Label the following:

Adenine 

Guanine 

Cytosine 

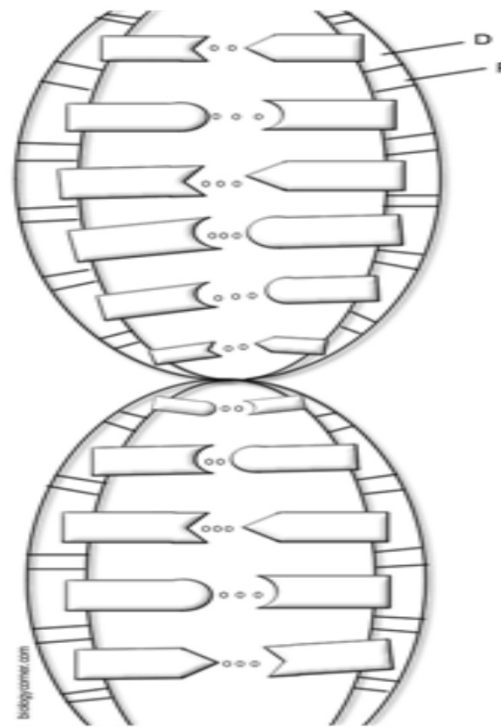
Thymine 

Hydrogen Bonds

Phosphate

Deoxyribose Sugar

DNA - The Double Helix



http://www.youtube.com/watch?v=hnSPGlpZx_Q

THE DNA RAP

<http://www.youtube.com/watch?v=d1UPf7IXeO8>