



Bio I
Notes: Nucleus - DNA Discovery and Structure

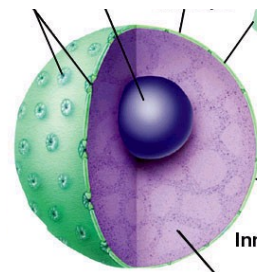
Organelle	Function	Prokaryotic	Eukaryotic	
			<i>Animal Cell</i>	<i>Plant Cell</i>
<i>Nuclear Envelope</i>				
<i>Nucleolus</i>				
<i>Chromatin</i>				
<i>Chromosome</i>				

Structure and components of the nucleus

1.

2.

3.



In all living cells, DNA molecules are the storehouses of information about heritable traits.

DNA:

Structure of a nucleotide:

1.

2.

3.

a.

b.

c.

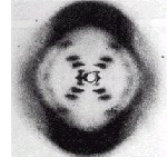
d.

Discovery of the structure of DNA

- Erwin Chargaff (1940's and early 50's):

- Chargaff's Rule:

- Maurice Wilkins and Rosalind Franklin (early 50's):



- James Watson and Francis Crick (1952):

Positioning of DNA nucleotides

- 5' to 3' positioning of chains of DNA:

- Double helix: