



DNA and Bioethics

Hershey and _____	<ul style="list-style-type: none"> • Virus -made of _____ and _____ • The experiments • a virus with either _____ DNA or radioactive protein were used to _____ bacteria • Either the radioactive _____ or radioactive DNA would be _____ to the bacteria • Identifying _____ is transferred would identify the _____. • Only the radioactively labeled _____ was transferred.
DNA Structure	<ul style="list-style-type: none"> • Composed of _____ • nitrogen containing base, a five -carbon sugar (_____), and a _____ group. • Four possible bases: _____ (A), _____ (G), _____ (C), or _____ (T)
Chargaff's Rule	<ul style="list-style-type: none"> • 1st: The composition of DNA _____ from one _____ to another. • This molecular diversity added _____ that DNA could be the genetic material. • 2nd: the _____ of one base always approximately _____ the amount of a particular second base. • Example: _____ equals the number of _____
Base Pairing	<ul style="list-style-type: none"> • _____ - Adenine and guanine • _____ ring structures. • _____ - Thymine and cytosine • _____ ring structure. • A purine _____ with a pyrimidine in the DNA double helix! <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Purine</p> </div> <div style="text-align: center;">  <p>Pyrimidine</p> </div> </div>
The _____ _____ _____	<ul style="list-style-type: none"> • _____ • Worked with DNA fibers. • Maurice Wilkins, used _____ diffraction _____ techniques to analyze the structure of DNA. • In February 1953, Francis _____ and James D. _____ had started to build a model of DNA. <ul style="list-style-type: none"> • indirectly obtained Franklin's data which had crucial information <p>Crick and Watson then _____ their _____ model of DNA! (They get most of the credit)</p>

		RNA	DNA
	Specific Base		
	Sugar		
	Size		
	Location		
Human Genome project	Types		
	<ul style="list-style-type: none"> ● The completion of _____! WOW!!!! ● However, is knowing all of our _____ a good thing? 		
Ethical, Legal, Social issues	<ul style="list-style-type: none"> ● Imagine someone analyzes part of your DNA. Who _____ that information? ● What if your _____ found out you were predisposed to develop a devastating genetic disease. Might they decide to _____ your insurance? Privacy issues concerning genetic information is an important issue in this day and age. ● _____ stands for Ethical, Legal and Social Issues. 		
Biogenetics Concerns	<ul style="list-style-type: none"> ● Who _____ genetically _____ organisms such as bacteria? ● Can such organisms be _____ like inventions? ● Are genetically modified _____ safe to _____? Might they have _____ harmful effects on the people who consume them? ● Are genetically engineered crops safe for the _____? ● Might they _____ other organisms or even entire ecosystems? ● Who controls a person's _____ information? What safeguards ensure that the information is kept _____? ● How far should we go to ensure that children are free of _____? Should a pregnancy be _____ if the fetus has a mutation for a serious _____? 		