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| Hershey and \_\_\_\_\_\_\_  DNA Structure  Chargaff’s Rule  Base Pairing  The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Human Genome project  Ethical, Legal, Social issues  Biogenetics Concerns | * **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. * **Composed of \_\_\_\_\_\_\_\_\_\_\_** * nitrogen containing base, a five -carbon sugar (\_\_\_\_\_\_\_\_\_\_\_), and a \_\_\_\_\_\_\_\_\_\_ group. * **Four possible bases: \_\_\_\_\_\_\_\_\_ (A), \_\_\_\_\_\_\_\_ (G), \_\_\_\_\_\_\_\_\_ (C), or \_\_\_\_\_\_ (T)** * **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 \_\_\_\_\_\_\_\_\_\_\_** * **\_\_\_\_\_\_\_\_\_\_- Adenine and guanine** * \_\_\_\_\_ ring structures. * **\_\_\_\_\_\_\_\_\_- Thymine and cytosine** * \_\_\_\_ ring structure. * **A purine \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ with a pyrimidine in the DNA double helix!**     Purine Pyrimidine   * **\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_**   + 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.**    + indirectly obtained Franklin's data which had crucial information   **Crick and Watson then \_\_\_\_\_\_\_\_\_\_\_ their \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ model of DNA! (They get most of the credit)**   |  |  |  | | --- | --- | --- | |  | **RNA** | **DNA** | |  |  |  | | **Specific Base** |  |  | | **Sugar** |  |  | | **Size** |  |  | | **Location** |  |  | | **Types** |  |  |  * The completion of \_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_! WOW!!!!! * However, is knowing all of our \_\_\_\_\_\_\_ a good thing? * 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. * 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 \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_? |
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