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| Human Genome project  Ethical, Legal, Social issues  Biogenetics Concerns  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Recessive or Dominant?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Sex Linked or autosomal  Color Blindness  \_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 51   * 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 \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_? * Shows the \_\_\_\_\_\_\_\_\_\_ of a trait over \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_. * Commonly created for families * outlines the inheritance patterns of \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_. * Scientists can tell the genetics of inheritance from studying a pedigree, * \_\_\_\_\_\_\_\_\_\_ (on the \_\_ or \_\_ chromosome) * \_\_\_\_\_\_\_\_\_\_\_ (on a chromosome that does not determine sex), * dominant or \_\_\_\_\_\_\_\_\_\_\_ * recessive inheritance of a disorder through\_\_\_\_\_\_\_\_ generations * If a trait is \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_, every person with the trait will have a parent with the trait. * If the trait is \_\_\_\_\_\_\_\_\_\_, a person with the trait may have \_\_\_\_\_, \_\_\_\_\_ or \_\_\_\_\_\_\_\_\_parent with the trait. * If a person shows the \_\_\_\_\_\_\_\_\_ phenotype, they could be either homozygous dominant (\_\_\_\_) or heterozygous (\_\_\_\_). * A person who is \_\_\_\_\_\_\_\_\_\_ (Aa) for a recessive allele of a trait is called a \_\_\_\_\_\_\_ because they carry a copy of the recessive allele even though they don’t have the disease. * Only people who are \_\_\_\_\_\_\_\_\_\_\_ for a recessive allele of a trait will have the trait. * A \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ is a chromosome that determines the sex of an organism.   + Humans have two sex chromosomes, \_\_\_ and \_\_\_\_.   + \_\_\_\_\_\_\_\_ have two X chromosomes (\_\_\_), and \_\_\_\_\_\_ have one \_\_\_ and one \_\_\_ (XY).   + A \_\_\_\_\_\_\_\_\_\_\_\_ trait is a trait whose allele is found on a sex chromosome.   + The human \_\_ is much \_\_\_\_\_\_ and has many more genes than Y.   + There are many \_\_\_\_\_\_ sex-linked traits on \_\_ than Y.   + Most are \_\_\_\_\_\_\_\_\_\_, because males only have \_\_\_\_ \_\_ if they inherit the trait then they will \_\_\_\_\_\_\_ it. These traits are much more \_\_\_\_\_\_\_\_ in \_\_\_\_ than women.   + Women have \_\_\_\_ \_\_ so if they express the trait then they got two copies of the \_\_\_\_, they can also only receive one copy and be a “\_\_\_\_\_\_\_” of the trait.      * \_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_ in a heterozygous offspring * Neither allele is completely \_\_\_\_\_\_\_\_\_\_\_ nor completely \_\_\_\_\_\_\_\_\_\_\_. * Example: \_\_\_\_\_\_ shorthorn cattle have codominant genes for hair color. The coat has \_\_\_\_\_\_ \_\_\_\_\_ and \_\_\_\_\_ hairs. * \_\_\_\_\_\_\_\_\_\_\_ of the offspring is somewhere \_\_ \_\_\_\_\_\_\_\_\_ the phenotypes of both parents, a completely dominant allele does not occur. * \_\_\_\_\_\_\_\_\_\_ of both genes. * Example: when \_\_\_\_ snapdragon (CRCR) are crossed with \_\_\_\_\_ snapdragons (CWCW), the F1hybrids are all \_\_\_\_\_ heterozygotes for flower color (CRCW). The pink color is an intermediate between the two parent colors. When two F1 (CRCW) \_\_\_\_\_\_\_\_ are crossed they will produce red, pink, and white flowers. * The\_\_\_\_\_\_\_\_ can be determined by it’s \_\_\_\_\_\_\_\_\_\_\_\_ |
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