Punnet square lab

Science, Genetics



SCI115 Introduction to Biology Name: Punnett Squares Virtual lab (Week 5) Go to the following website for completion: http://www. mhhe. com/biosci/genbio/virtual labs/BL 05/BL 05. html Upon completion of the Punnett Squares Virtual Lab, please answer the following questions thoroughly using complete sentences and proper grammar and spelling. 1. For one of the monohybrid crosses you performed in this Investigation, describe how to use the phenotype ratios to determine the percentage of offspring displaying each trait. Well for one once you have the phenotypes all done on your Punnet Square then you go through and see what ratio of the offspring got the traits of the parents. For mine were to create phenotypes with 50% from each so my ratios were 2: 4. 2. Can the genotype for a graybodied fly be determined? Why or why not? Describe all of the possible genotypes for a fly with that phenotype. Yes the genotype of a gray-bodied fly can be determined by doing a Punnet square for those types like I did one parent was Gg and the other was gg so the possibilities with were GG, Gg, GG, Gg which meant that all the offspring would be gray bodied fly's. 3. Explain why an organism with a homozygous dominant genotype has the same phenotype as an organism with a heterozygous genotype. Well the reason that a homozygous dominant genotype has the same phenotype as a heterozygous genotype is like this which can be called by the information given a dihybrid crossing which, " or example, a heterozygous parent (PpTt) can pass on the following combinations of alleles: (PT), (Pt), (pT), (pt). Each box of the Punnett square is labeled with one of these possible combinations of alleles. " So when you look at it that way the offspring have both allies and that a homozygous and heterozygous cane have the same genotype 4. What

genetic information can be obtained from a Punnett square? What genetic information cannot be determined from a Punnett square? The genetic information that can be obtained from the Punnett square is what kind of offspring two things will have and mostly likely what they will look, have, or be short, tall etc... The only genetic thing that cannot be determined is the sex that is something that can only be told once born, grown, or so on.