

Study Guide

Questions to hand in-

1. What is a trait? Give an example.
2. What is the difference between genes and alleles?
3. Give me an example of a genotype and a phenotype.
4. What's the difference between dominant and recessive?
5. Using alleles A and a show me what homozygous dominant, heterozygous and homozygous recessive are.
6. Show me how to create a punnett square USING the FIVE STEP METHOD we used in class (you can find the notes online) DON'T use the example online. DO YOUR OWN!!!!
7. Why do we create punnett squares?
8. Do the probabilities of offspring (the 25% for each offspring square) represent what ratios of children you will actually get? Why or why not?
9. If you cross a heterozygous genotype with another heterozygous genotype, what probability percentages will result for the offspring?
10. Who was Gregor Mendel and why was his work important?

Just for your information, WHAT YOU NEED TO KNOW!!!

- You should be able understand and use the following terms; gene, trait, allele, homozygous, dominant, recessive, heterozygous, genotype, phenotype
- What a punnett square is, why we make them and how to make one
- The difference between a genotype and a phenotype
- You should be able to create a punnett square using the five steps we used in class (example is online in the notes) to show a cross for one trait. You will need to assign letters, show which is dominant and recessive, what the phenotypes are for the dominant and recessive alleles, the possible genotypes of the parents, fill in the square and tell me the probabilities and the phenotypes of the offspring.
- Know who Gregor Mendel was and the importance of his work