

Name _____ Date _____

Period _____ Honors Biology

Punnett Square Web Lab

<http://www2.edc.org/weblabs/Punnett/punnettsquares.html>

Pre-Lab:

Define:

1. genotype:
2. phenotype:
3. allele:
4. Explain the purpose of a Punnett square.

Web Lab:

1. Why have the two alleles for the color gene been separated and each given a row or column?
2. Differentiate between the terms homozygous and heterozygous.
3. Draw the Punnett square for $Bb \times Bb$.
4. List the genotypes in fractions and percents that result from this cross.

5. List the phenotypes in fractions and percents that result from this cross.

5. Draw the Punnett square for the two lemmings.

6. List the genotypes in fractions and percents that result from this cross.

7. List the phenotypes in fractions and percents that result from this cross.

8. Describe albinism. How is it inherited?

9. How many carriers are shown in this Punnett square?

10. Which two lemmings did you pick to make your chance of producing an albino lemming better than 25%?

11. Draw the Punnett square for the cross you chose. Circle the lemmings predicted to be albino.