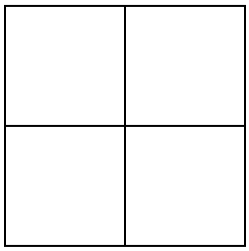
PUNNETT SQUARES

name:

Refer to pages 84-89 in science textbook to help with this information.

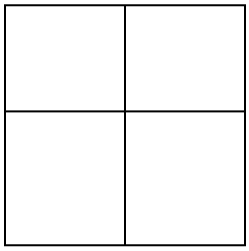
1. B= Brown eyes b= blue eyes Mom= Bb Dad= BB
   What are the eye color possibilities if they chose to have children? List both GENOTYPE and PHENOTYPE possibilities.

Genotypes Phenotypes



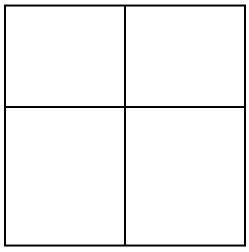
2. Curly hair is dominant, and straight hair is recessive. A woman with purebred curly hair marries a man who has straight hair. Predict the outcomes of children. Use C for letter. List both GENOTYPE and PHENOTYPE possibilities.

Genotypes Phenotypes



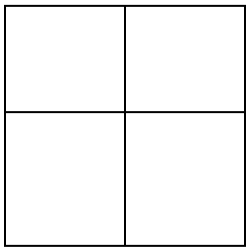
3. Black hair is homozygous dominant. Brown hair is heterozygous. Blonde hair is homozygous recessive. (This is an example of incomplete dominance or co-dominance) A woman with brown hair marries a man with brown hair. What are the possible outcomes for their kids? Use H. List both GENOTYPE and PHENOTYPE possibilities.

Genotypes Phenotypes



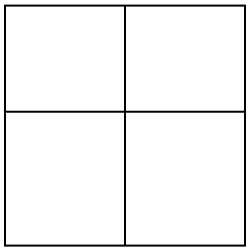
4. Free hanging earlobes are dominant over attached earlobes. Complete the Punnett Square for the following individuals: Mom = EE free and Dad = ee attached. List GENOTYPE and PHENOTYPE.

Genotypes Phenotypes



5. In purple people eaters, one-horn is dominant and no horn is recessive. Draw a Punnett Square showing the cross of a purple people eater that is hybrid for horns with a purple people eater that does not have horns. Use H as your letter.

Genotypes Phenotypes



6. In seals, long whiskers are dominant over short whiskers. What percentage of offspring would be expected to have short whiskers from the cross of two long-whiskered seals, one parent is homozygous dominant and the other one is heterozygous? Show the Punnett as well as the percentage!

7. If one parent seal is pure long-whiskered and the other is short-whiskered, what percent of offspring would have short whiskers? Show the Punnett as well as the percentage!

8. In humans, brown eyes (B) are dominant over blue (b). A brown-eyed man marries a blue-eyed woman and they have three children, two of whom are brown-eyed and one of whom is blue-eyed. Draw the Punnett square that illustrates this marriage. List both genotypes AND phenotypes.