Key

Punnet Square Practice

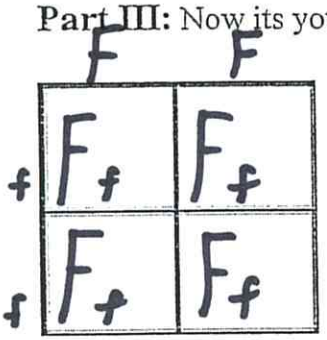
Part I: First, lets practice some vocabulary.

Practice with terms. For all questions, use these facts: the trait is fur color (f). Black fur is dominant (F) over gray fur (f).

1. Write the letter of the dominant allele. F
2. Write the letter of the recessive allele. f
3. Write the genotype for gray fur (2 alleles!). ff
4. Write the genotype for Black fur (2alleles!). FF or Ff
5. Write out the homozygous dominant genotype. FF
6. Write out the heterozygous genotype. Ff
7. Write out the homozygous recessive genotype. ff
8. Write the phenotype for #5. Blk
9. Write the phenotype for #6. Blk
10. Write the phenotype for #7. Grey

Part III: Now its you're turn to make a Punnett Square. Still using fur color, do the following problems.

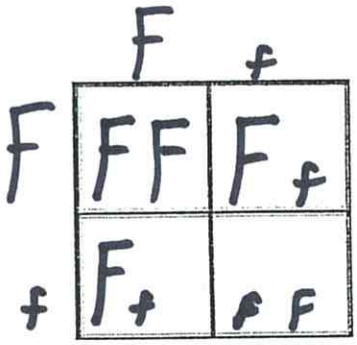
Black - F, gray - f



1. If the mother is homozygous recessive (ff) and the father is homozygous dominant (FF).

a) Write the genotype probabilities. Ff = 100%

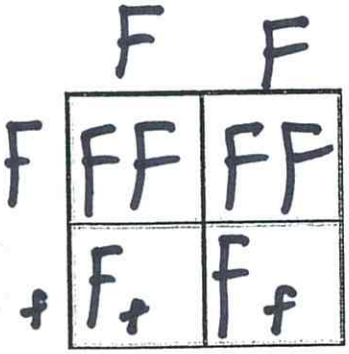
b) Write the phenotype probabilities. Blk = 100%



2. If the mother is heterozygous (Ff), and the father is heterozygous (Ff).

a) Write the genotype probabilities. FF = 25% Ff = 50% ff = 25%

b) Write the phenotype probabilities. Blk = 75% Grey = 25%



3. If the mother is heterozygous, and the father is homozygous dominant. Ff x FF

a) Write the genotype probabilities. FF = 50% Ff = 50%

b) Write the phenotype probabilities. Blk = 100%