

For all of the following questions, use these facts: the trait is Black eyes
(B). Black eyes is dominant over blue eyes (b)

1. Write the letter of the dominant allele.
2. Write the letter of the recessive allele.
3. Write out the homozygous dominant genotype
4. Write out the heterozygous genotype
5. Write out the homozygous recessive genotype.
6. Write the genotype for blue eyes.
7. Write the genotype for Black eyes.
8. Write the phenotype for #3.
9. Write the phenotype for #4
10. Write the phenotype for #5.

If the mother is heterozygous, and the father is homozygous dominant.

BB : Bb : bb

a) Write the genotype ratio

b) Write the phenotype ratio **Black eyes : blue eyes**

If the mother is homozygous recessive, and the father is heterozygous.

BB : Bb : bb

a) Write the genotype ratio

b) Write the phenotype ratio **Black eyes : blue eyes**

One male wolf with genotype (Ffbb) mates with another wolf (ffBb)

Black fur (F)

Gray fur (f)

Black eyes (B)

blue eyes (b)

Find proportion of 16 offsprings:

Black Fur
Black eyes

Black Fur
Blue eyes

Gray fur
Black eyes

Gray fur
Blue eyes