

# NON-MENDELIAN GENETICS QUESTIONS

1. A cross between a blue blahblah bird & a white blahblah bird produces silver blahblah birds.

a) What are the genotypes of the parent blahblah birds in the original cross?


b) What is the genotype of the silver offspring?

c) What would be the phenotypic ratios of offspring produced by two silver blahblah birds?


2. The color of fruit for plant "X" is determined by two alleles. When two plants with orange fruits are crossed the following phenotypic ratios are present in the offspring: 25% red fruit, 50% orange fruit, 25% yellow fruit. What are the genotypes of the parent orange-fruited plants?


3. Predict the phenotypic ratios of offspring when a homozygous white cow is crossed with a red roan bull.


4. What should the genotypes & phenotypes for parent cattle be if a farmer wanted only cattle with red fur?

5. A cross between a black cat & a tan cat produces a tabby pattern (black & tan fur together).

a) What pattern of inheritance does this illustrate?

b) What percent of kittens would have tan fur if a tabby cat is crossed with a black cat?


6. A woman with Type O blood and a man who is Type AB have are expecting a child. What are the possible blood types of the kid?


7. What are the possible blood types of a child who's parents are both heterozygous for "B" blood type?


8. What are the chances of a woman with Type AB and a man with Type A having a child with Type O?


9. Determine the possible genotypes & phenotypes with respect to blood type for a couple who's blood types are homozygous A & heterozygous B.
