

Genetics: X Linked Genes

In fruit flies, eye color is a sex linked trait.

RED IS DOMINANT TO WHITE

1. What are the sexes and eye colors of flies with the following genotypes

a. $X^R X^r$ _____

b. $X^R X^R$ _____

c. $X^R Y$ _____

d. $X^r X^r$ _____

2. What are the genotypes of these flies:

a. White eyed, male _____

b. White eyed, female _____

c. Red eyed, male _____

3. Show the cross of a white eyed female with a red-eyed male. Give percentages for offspring.

_____ red eyed, female _____ red eyed, male

_____ white eyed, female _____ white eyed, male

4. Show the cross of a red eyed female (heterozygous) with a red eyed male?

_____ x _____

_____ red eyed, female _____ red eyed, male

_____ white eyed, female _____ white eyed, male