

SEX-LINKED GENES

COMPLETE THE FOLLOWING QUESTIONS ON YOUR OWN PAPER...

- #1. In fruit flies, eye color is linked to the X-chromosome. Red eyes are dominant to white eyes. Show a cross between a white-eyed female and a red-eyed male. What percent of the offspring will have white eyes?

- #2. Now show a cross between a white-eyed male and a heterozygous red-eyed female fruit fly.

- #3. Hemophilia in humans is due to an X-chromosome mutation. What percent of female and male children will be affected with hemophilia in a family where the mother is a carrier and the father is a hemophiliac?