

Trihybrid Activity

Complete the following crosses. Show your work either neatly on a piece of paper or on a google doc.

1. A plant that is homozygous dominant for yellow seeds and tall, and is red for an incomplete dominant flower colour is crossed with a plant that is homozygous recessive for green seeds and short, and is white for an incomplete dominant flower colour.

Determine the genotypes of both parents: _____ x _____

- a. Complete a punnett square for this cross.
 - b. What are the genotypic and phenotypic ratios for all offspring?
 - c. Cross two hybrid F1 individuals, show the punnett square for this cross.
 - d. What are the genotypic and phenotypic ratios for the F2 generation individuals?
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2. In humans, being right handed (R) is dominant over being left handed (r), also normal vision is dominant over color blindness (which is sex linked), and blood types with phenotypes A, B, and O and codominant traits.
 - a. Show the cross between a female parent who is homozygous dominant for the right handed gene, who is a carrier for colour blindness, and has type AB blood and a male parent who is left handed, has normal vision and has type O blood.
 - b. Record all genotypic and phenotypic ratios for this cross.