# Extended Mendelian Exam Prep

What is independent assortment?

Complete a dihybrid Punnett square for two plants that are homozygous, yellow and round. (Hint: DdGg x DdGg). What is the resulting phenotype and genotype?

What proportion of my plants will be tall, green, and wrinkled? (Hint: trihybrid method, it will be ABc).

What are the criteria for classifying chromosomes as homologous pairs?

Answer the following questions using this information:

A scientist completed an experiment and concluded that 276 of her plants were tall and yellow, 73 were tall and green, 70 were dwarf and yellow, and 30 were dwarf and green.

What is your Null hypothesis?

What is your alternative hypothesis?

What is the formula for Chi square?

Calculate the expected values for each plant.

Calculate the chi value for this problem.

Using the probability table, find the P value.

Using this value, what can you conclude about this problem?

What is the mode of inheritance for this pedigree? Label everyone with their expected genotype.