

Activity: Dihybrid Cross Corn Genetics "Down on the Farm"

In corn, purple (**P**) is dominant to yellow (**p**) and smooth kernels (**S**) is dominant to wrinkled kernels (**s**). Assign each group member one row on your corn sample. Count and tally phenotypes in your row. Record the number of each phenotype in the data table. Then, add together your phenotype totals with those of the other group members for your corn sample. **Determine the phenotype ratio and parental GENOTYPE for your ear of corn.** *Yes, you must think backwards!* Then, complete the dihybrid cross to verify your answer.

	Purple, Smooth	Purple, Wrinkled	Yellow, Smooth	Yellow, Wrinkled
Individual Tally	Total =	Total =	Total =	Total =
Group Total Count For Sample				

Corn Type (C or D): _____

Possible Genotypes & Phenotypes:

Final Phenotype Ratio:

Parental Genotype:

Possible Gametes:

Phenotype Ratios:

Genotype Ratios: