

WORKSHEET #1
Observations

Trait Inheritance -

NAME _____

Date planted: _____

What was the color of the seed planted (phenotype)?

A: yellow

Use the letter 'y' to denote this gene. The dominant allele is 'Y'. The recessive allele is 'y'.

What are the possible genotypes of the seed for this trait?

A: YY, Yy, yy We do not know yet if the yellow allele is dominant or recessive.

From what is observed, can the genotype and phenotype of the parents that made this seed be determined yet? Why or why not?

A: No. Because we do not know if the yellow allele is dominant or recessive. Therefore we don't know the genotype of the offspring (seed planted) and can't determine the genotype or phenotype of the parents.

Half silk date: _____

Harvest date: _____

Collect and record data from a single ear:

How many yellow kernels?

A: Numbers will vary

How many white kernels?

A: Numbers will vary

What is the ratio of yellow to white kernels?

A: 3 yellow:1 white (may need to round or approximate to get exact ratio)

Which allele does this indicate is dominant, yellow or white?