

Bio 111 Pre-Lab for Lab #06: Name _____

Genetics Practice Problems TA & Sect. _____

1) Make up a completely fictitious organism with a completely fictitious character and two completely fictitious traits of that character. Make up a cross result that is only consistent with **simple dominance**. That is: the results of the cross can only be explained by a simple dominance model. Give proper allele symbols for this model and give the genotypes of the parents and all the offspring in the cross.

Note that the examples given are only for illustration purposes. They may not be correct answers and you should not use them in your answer.

a) Give your character (for example, "eye color"): _____

b) Give the two traits of your character (for example, "red" and "blue"):

c) Give a cross result involving this character and traits that is only consistent with **simple dominance** (for example, "red x red gives 3 red and 39 blue offspring"):

d) Define appropriate allele symbols for your character and traits and write them in the table below:

<u>allele</u>	<u>contribution to phenotype</u>
---------------	----------------------------------

e) Using the symbols you defined in (d), give the genotypes of the parents and each type of offspring from the cross in (c). Be sure to clearly identify each of the individuals who's genotype you are giving (for example, "the first red parent is Dd").

