

Part 1: **MAKING MONSTERS:** We have learned about **Mendelian Genetics:** when one gene determines a trait. This activity will help you understand the difference between Genotype and Phenotype. You will flip coins to determine the genotype and then define the phenotype;

Definitions:

Allele:	
Genotype	Phenotype

Trait/alleles	Parent 1	Parent 2	Genotype	Phenotype
Fur Colour [Yellow F] [Purple f]				
Eyes [One E] [Two e]				
Tail Colour [Striped S] [Solid s]				
Feet [Webbed P] [Clawed p]				
Arms [Long L] [Short l]				
Legs [Tall T] [Short t]				
Horns [Horns H] [No horns h]				
Teeth [Sharp D] [Square d]				
Body [Round R] [Pear shaped r]				

Draw Your Monster: (name it)

Name: _____ Class: _____

Date: _____ /10

Part 2: **MATING MONSTERS**

Your monster has grown up now and wants to make some mini monsters. Find your monster a mate and complete the probability Punnett Squares for each trait:

Trait/alleles	Your monster	mate	Punnett Square	Phenotype probability
Fur Colour				
Eyes				
Tail Colour				
Feet				
Arms				
Legs				
Horns				
Teeth				
Body				

Name: _____ Class: _____

Date: _____ /10

Questions:

1. In the Making Monsters Section 1, were the parents of the monster Heterozygous or Homozygous?

2. What similarities did your second Generation Monster have that were common with its parents?

3. What traits do you have in common with your parents and your grandparents?

Name: _____ Class: _____

Date: _____ /10