



**Pre-Lab Questions:**

1. Genes are inherited. What does that mean?
2. In your own words, what is a gene?

**During the Lab:**

Use the following chart to remember of the “alleles” that your creature could inherit from its parents. The first set of alleles is already filled in for you.

Symbol for Allele	Trait (phenotype)	Symbol for Allele	Trait (phenotype)
A	2 antennae	a	4 antennae

Use the following chart to record the genotypes and phenotypes you randomly selected for your creature:

Genotype	Phenotype

**Post-Lab Questions:**

1. A=2 antennae, and a=4 antennae. You randomly select the “A” allele from one parent and “a” allele from the other parent for a genotype of “Aa.” What will the phenotype be for this trait?
2. If one parent is “AA” and the other is “aa” for antennae number, what are the chances of them having an offspring that has 4 antennae? Use a Punnett square to support your answer.