Name: _____

Post-Lab Questions

1. A mother and father both have a phenotype of attached earlobes (a recessive trait). Is it possible for them to give birth to a child with free earlobes (a dominant trait). Explain. Draw the Punnett square, if needed.

2. Use the Hardy-Weinberg equation to find the probable genotypes of your classmates for the trait of PTC tasting.

   q =

   p =

   Homozygous dominant: _____%

   Heterozygous: _____%

   Homozygous recessive: _____%

3. Complete the following Punnett square for blood types.

   Father

Mother		I^A	i
	I^A		
	I^B		

   Square 3 (*Hint:* Remember co-dominance.)

   Square 3

   Homozygous dominant = _____%

   Heterozygous = _____%

   Homozygous recessive = _____%

   Do these percentages add up to 100%?

4. For the blood types shown above, what will be the observed phenotype for each genotype?

   Genotype **Phenotype**

5. The person from which the unknown blood sample came from is having a child. Is there any possibility this person could have a child with type O blood? Explain.