DIHYBRID CROSSES

Directions: For all problems you must have a Punnett square and the Phenotypic ratios. Remember Dihybrid Crosses have two traits for each parent! Put all answers on a separate sheet of paper!!

1. In certain bacteria, an oval shape is dominant over round and thick cell walls are dominant over thin. Cross a heterozygous oval, heterozygous thick cell walled bacteria with a round, thin cell walled bacteria.

2. In guinea pigs, black coat color is dominant over white and short hair is dominant over long. Show the Punnett Square for a cross between a homozygous black, homozygous shorthaired guinea pig and a homozygous white, homozygous longhaired guinea pig.

3. In humans brown hair is dominant to blonde and tall is dominant to short. Cross a homozygous brown haired, homozygous short individual with a blonde haired, heterozygous tall individual.

4. Pointy ears are dominant to floppy ears and regular legs are dominant to bowlegs. Cross a heterozygous llama for both traits with one that is homozygous recessive for both traits.

5. Green seeds are dominant to yellow and smooth seeds are dominant to wrinkled. Cross a heterozygous green, heterozygous smooth seed with a heterozygous green, heterozygous smooth seed.