

Name: \_\_\_\_\_ Period: \_\_\_ Date: \_\_\_\_\_

Worksheet #2 – Genetics Practice Problem (dihybrids)

1. In tomatoes, yellow fruit and dwarf vine are due to recessive genes. The dominant genes are for red fruit and tall vines.
  - A. Make a separate key for each trait
  - B. If pollen (male) from a pure dwarf plant bearing red fruit is placed on the pistil (female) of a pure tall plant bearing yellow fruit, what types of offspring would be expected in the  $F_1$ 's?
  
  - C. Of the  $F_1$  generations are crossed among themselves, what would be expected in the  $F_2$ 's?
  
2. Some dogs bark when trailing; others are silent. The barking trait is due to a dominant gene. Erect ears are dominant to drooping ears.
  - A. Make a separate key for each trait.
  - B. What kind of pups would be expected from a heterozygous erect-eared barker mated to a droop eared, silent trailer?