

Name \_\_\_\_\_ Pd \_\_\_\_\_

**Punnett Square Problems # 2 (20 points)**  
***Simple, Incomplete & Co Dominance***

1. a. Cabbage butterflies can have either white wings “W” or yellow wings “w”. White wings are dominant. Cross a heterozygous parent with a homozygous recessive parent in a punnett square below. (1 point)

b. Complete the chart below for the offspring. (.5 points each)

Ratio of Genotypes	Ratio of Phenotypes	% Chance for White Wings	% Chance for Yellow Wings

c. Is this an example of Simple Dominance, CoDominance, or Incomplete Dominance? (.5 points)

2. a. In dogs, there is a hereditary type of deafness caused by a recessive gene. Two dogs who carry the gene for deafness but have normal hearing are mated. Cross them in a punnett square below using the letter “H”. (1 point)

b. Complete the chart below for the offspring. (.5 points each)

Ratio of Genotypes	Ratio of Phenotypes	% Chance for Normal Hearing	% Chance for Deafness

c. Is this an example of Simple Dominance, CoDominance, or Incomplete Dominance? (.5 points)

3. a. Can you curl your tongue up on the sides? Tongue-curling in humans is a dominant genetic trait. Suppose a man who is Tt for tongue-curling marries a woman who is also Tt for this trait. Cross them in a punnett square below. (1 point)

b. Complete the chart below for the offspring. (.5 points each)

Ratio of Genotypes	Ratio of Phenotypes	% Chance for Tongue-Curling	% Chance for Non-Tongue-Curling

c. Is this an example of Simple Dominance, CoDominance, or Incomplete Dominance? (.5 points)

4. a. In radishes, the homozygous plants can either have red flesh “R” or white flesh “W”. However, heterozygous radishes have pink flesh. Cross two heterozygous radish plants in a punnett square below. (1 point)

b. Complete the chart below for the offspring. (.5 points each)

Ratio of Genotypes	Ratio of Phenotypes	% Chance for Red	% Chance for White	% Chance for Pink

c. Is this an example of Simple Dominance, CoDominance, or Incomplete Dominance? (.5 points)

5. a. In some chickens, the homozygous chickens can either have black feathers “B” or white feathers “W”. However heterozygous chickens will have both black and white feathers. Cross a white chicken with a black and white chicken in a punnett square below. (1 point)

b. Complete the chart below for the offspring. (.5 points each)

Ratio of Genotypes	Ratio of Phenotypes	% Chance for Black Feathers	% Chance for White Feathers	% Chance for B & W Feathers

c. Is this an example of Simple Dominance, CoDominance, or Incomplete Dominance? (.5 points)

6. a. In some mice, the homozygous mice can either have white fur “W” or yellow fur “Y”. However, heterozygous mice will have cream fur. Cross a white mouse with a yellow mouse in a punnett square below. (1 point)

b. Complete the chart below for the offspring. (.5 points each)

Ratio of Genotypes	Ratio of Phenotypes	% Chance for White Fur	% Chance for Yellow Fur	% Chance for Cream Fur

c. Is this an example of Simple Dominance, CoDominance, or Incomplete Dominance? (.5 points)