UNIT #4
PUNNETT SQUARE TEST

Complete the following Punnett Squares and answer the questions. NOTE: You MUST fill in all "blanks" and work out all Punnett Squares. The only exception is the heterozygous/heterozygous dihybrid cross—where you must fill in the gametes—but don't need to work out the Punnett Square. Each Punnett Square is worth points—if you leave it out, you miss points! The dihybrid boxes are drawn in for you—you must draw the monohybrid boxes for yourself).

1. In rabbits, the allele for black coat color is dominant over the allele for brown coat color. The allele for straight hair is dominant over the allele for curly hair. If you bred two rabbits , one with brown coat and curly hair, and the other homozygous for black coat and straight hair, what would the cross look like?

   How many of the baby bunnies would have brown coats and straight hair? _____
   How many of the baby bunnies would have brown coats and curly hair? _____

2. A blue-eyed, left handed woman marries a brown-eyed, right handed man who is heterozygous for both traits.

   If blue eyes and left-handedness are recessive, what proportion of their children would have blue eyes and be right handed? _____

   What proportion of their children would have brown eyes and be right-handed? _____

3 In pea plants, the gene for round seed (R) is dominant, and wrinkled seeds (r) are recessive. The endosperm of the pea is also either starchy, a dominant gene (S), or waxy (s). In a cross between a heterozygous round seeded plant that is waxy, and another plant heterozygous for both traits, what is the expected phenotypic ratio? _____
