**Punnett Squares Worksheet**

**Show all of your work** on a separate sheet of lined paper, then write your final answers on these spaces (step 4 of our 4 step process). **Attach** your lined paper to this worksheet.

1. A TT (tall) plant is crossed with a tt (short plant).   
     What percentage of the offspring will be tall? \_\_\_\_\_\_\_\_\_\_\_

2. A Tt plant is crossed with a Tt plant.   
    What percentage of the offspring will be short? \_\_\_\_\_\_

3. A heterozygous round seeded plant (Rr) is crossed with a  
homozygous round seeded plant (RR).   
What percentage of the offspring will be homozygous (RR)? \_\_\_\_\_\_\_\_\_\_\_\_

4.A homozygous round seeded plant is crossed with a homozygous   
wrinkled seeded plant. What are the genotypes of the parents? \_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_

What percentage of the offspring will also be homozygous? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. In pea plants purple flowers are dominant to white flowers.   
If two white flowered plants are cross, what percentage of their   
offspring will be white flowered? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. A white flowered plant is crossed with a plant that is   
heterozygous for the trait. What percentage of the   
offspring will have purple flowers? \_\_\_\_\_\_\_\_\_\_\_\_\_

7. Two plants, both heterozygous for the gene that controls  
flower color are crossed. What percentage of their offspring  
will have purple flowers? \_\_\_\_\_\_\_\_\_\_\_\_\_\_  
What percentage will have white flowers? \_\_\_\_\_\_\_\_\_\_\_

8. In guinea pigs, the allele for short hair is dominant.   
What genotype would a heterozygous short haired guinea pig have? \_\_\_\_\_\_\_  
What genotype would a purebreeding short haired guinea pig have? \_\_\_\_\_\_\_  
What genotype would a long haired guinea pig have? \_\_\_\_\_\_\_\_

9. Show the cross for a pure breeding short haired guinea pig  
and a long haired guinea pig.  
What percentage of the offspring will have short hair? \_\_\_\_\_\_\_\_\_\_

10. Show the cross for two heterozygous guinea pigs.  
What percentage of the offspring will have short hair? \_\_\_\_\_\_\_\_  
What percentage of the offspring will have long hair? \_\_\_\_\_\_\_

11. Two short haired guinea pigs are mated several times. Out of 100  
offspring, 25 of them have long hair. What are the probable  
genotypes of the parents? \_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_ Show the cross to prove it!

Don’t forget to study **CODOMINANCE** AND **INCOMPELTE** **DOMINANCE** (hint hint cough cough)