

Name \_\_\_\_\_

Date \_\_\_\_\_

### **Monohybrid Cross Problems**

*Show your solution with a Punnett Square.*

1. In tomatoes, red fruit (**R**) is dominant over yellow fruit (**r**). A plant that is homozygous for red fruit is crossed with a plant that has yellow fruit. What would be the genotypes and phenotypes of the P<sub>1</sub> and F<sub>1</sub> generations?

**P<sub>1</sub>**

**F<sub>1</sub>**


2. If two of the F<sub>1</sub> generation from the above cross were mated, what would be the genotypes and phenotypes of the F<sub>2</sub>?

**F<sub>1</sub>**

**F<sub>2</sub>**


3. In humans, being a tongue roller (**R**) is dominant over non-roller (**r**). A man who is a non-roller marries a woman who is heterozygous for tongue rolling.

Father's phenotype \_\_\_\_\_

Mother's phenotype \_\_\_\_\_

Father's genotype \_\_\_\_\_

Mother's genotype \_\_\_\_\_


What is the probability of this couple having a child who is a tongue roller? \_\_\_\_\_

4. Brown eyes in humans are dominant to blue eyes. A brown-eyed man, whose mother was blue-eyed, marries a brown-eyed woman whose father had blue eyes.

What is the probability that this couple will have a blue-eyed child? \_\_\_\_\_

*Show your solution below.*
