

Chapter 11-2 Single Trait Crosses

Name: _____ Date: _____ Period: _____

Punnett square worksheet – Monohybrid Crosses

Complete the following single trait crosses: if necessary draw a Punnett square. List the genotypic percentages and the phenotypic percentages of the offspring. Remember that the **capital letter is dominant**.

Example) A green pea plant (GG) is being crossed with a green pea plant (Gg).

	G	G
G	GG	GG
g	Gg	Gg

Genotype=
 GG 50%: Gg 50%: gg 0%
 Phenotype=
 Green 100%, Other 0%

1) A green pea plant (Gg) is crossed with a yellow pea plant (gg).

Genotype:

Phenotype:

2) A tall plant (TT) is crossed with a tall plant (Tt).

Genotype:

Phenotype:

3) A tall plant (Tt) is crossed with a short plant (tt).

Genotype:

Phenotype:

4) A red flower (Rr) is crossed with a white flower (rr).

Genotype:

Phenotype:

5) A white flower (rr) is crossed with a white flower (rr).

Genotype:

Phenotype:

6) A black chicken (BB) is crossed with a black chicken (BB).

Genotype:

Phenotype:

Punnett square problems continued

Complete the following problems. List the parent genotypes, draw and fill in a Punnett square, and then list the offspring genotypes and phenotype percentages.

1. A homozygous dominant brown mouse is crossed with a heterozygous brown mouse (tan is the recessive color).

Parent genotypes: _____ x _____

Genotype:

Phenotype:

2. Two heterozygous white (brown fur is recessive) rabbits are crossed.

Parent genotypes: _____ x _____

Genotype:

Phenotype:

3. Two heterozygous red flowers (white flowers are recessive) are crossed.

Parent genotypes: _____ x _____

Genotype:

Phenotype:

4. A homozygous tall plant is crossed with a heterozygous tall plant (short is the recessive size).

Parent genotypes: _____ x _____

Genotype:

Phenotype:

5. A heterozygous white rabbit is crossed with a homozygous black rabbit.

Parent genotypes: _____ x _____

Genotype:

Phenotype: