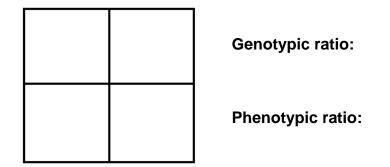
Worksheet: Monohybrid Crosses

Directions: Answer the following genetic cross problems. Complete Punnett Squares and show genotypic and phenotypic ratios. SHOW ALL WORK!

Single-Factor Crosses (Monohybrid)

1. In certain breeds of dogs, <u>deafness</u> is due to a **recessive** allele (**d**) of a particular gene, and <u>normal hearing</u> is due to its **dominant** allele (**D**). What is the expected outcome of a cross between two **heterozygous** dogs?

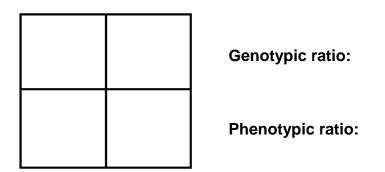


2. In Pea plants flowers can be either purple or white. <u>Purple</u> is **dominant** (**P**) and <u>white</u> is **recessive** (**p**). What are the genotypic and phenotypic ratios of a cross between a **homozygous dominant plant** and a **heterozygous plant**?

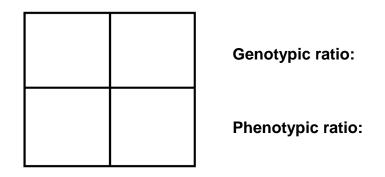
Genotypic ratio:

Phenotypic ratio:

3. Cross two white flowered pea plants. What are the genotypic and phenotypic ratios of offspring?



4. In Pea plants the allele for <u>tall</u> (T) is **dominant** and the allele for <u>short</u> plants (t) is **recessive**. What are the genotypic and phenotypic ratios for the following cross. Tt X Tt



5. In Pea plants the allele for <u>tall</u> (T) is **dominant** and the allele for <u>short</u> plants (t) is **recessive**. What are the genotypic and phenotypic ratios for the following cross. **TT X tt**

	Genotypic ratio:
	Phenotypic ratio: