

## Punnett Square Practice Assignment

Directions: For each of the following problems, complete the Punnett Square provided and fill in the information requested. Return to the content and review the tutorial as needed to complete this assignment. **The first problem is done for you in each group.**















1. Aa x aa (parents)

	A	a
a	Aa	aa
a	Aa	aa

2. Nn x Nn


3. Tt x Tt


Use the following table to help you with the remaining problems.

	Seed		Flower	Pod		Stem	
	Form	Cotyledons	Color	Form	Color	Place	Size
<b>Dominant</b>	 Grey & Round	 Yellow	 White	 Full	 Yellow	 Axial pods, Flowers along	 Long (6-7ft)
<b>Recessive</b>	 White & Wrinkled	 Green	 Violet	 Constricted	 Green	 Terminal pods, Flowers top	 Short (~1ft)
	1	2	3	4	5	6	7

Choose a letter to represent the alleles for each. Example: Flower color can be P and p. Size can be T and t.

**4. Cross a short plant with a heterozygous tall plant.**

Cross (parents):  $tt \times Tt$

	t	t
T	Tt	Tt
t	tt	tt

Genotype ratio:  $2Tt : 2tt$

Phenotype ratio:  $2 \text{ Tall} : 2 \text{ short}$

**5. Cross a plant that is heterozygous for pod color with a plant that has green pods.**

Cross (parents):


Genotype ratio:

Phenotype ratio:

**6. Cross a plant that is purebred for white flowers with a plant that has purple flowers.**

Cross (parents):


Genotype ratio:

Phenotype ratio: