

Name _____

Alleles, Genotype and Phenotype Practice

Vocab Review

- **Allele**- Different form of a gene that controls a trait (blue vs. brown eyes)
- **Genotype**- Combination of alleles an organism has (letter combination)
- **Phenotype**- Visible trait an organism has controlled by its genotype (how an organism LOOKS)
- **Homozygous dominant**- Having two **dominant** alleles (AA)
- **Heterozygous**- Having two different alleles - 1 dominant and 1 recessive (Aa)
- **Homozygous recessive** - having two **recessive** alleles (aa)

2. For each **genotype**, indicate whether it is heterozygous, homozygous dominant or homozygous recessive

AA _____	Ee _____
Bb _____	ff _____
Cc _____	GG _____
Dd _____	HH _____
li _____	Mm _____
Jj _____	nn _____
kk _____	OO _____
LI _____	Pp _____

2. For each of the **genotypes** below, determine the phenotype.

<i>Purple flowers are (P) dominant to white flowers (p)</i> PP _____ Pp _____ pp _____	<i>Brown eyes are (B) dominant to blue eyes (b)</i> BB _____ Bb _____ bb _____
<i>Round seeds are (R) dominant to wrinkled (r)</i> RR _____ Rr _____ rr _____	<i>Bobtails are (t) recessive (long tails dominant (T))</i> TT _____ Tt _____ tt _____

3. For each **phenotype**, list the genotypes. (Remember to use the letter of the dominant trait)

<i>Straight hair is dominant (S) to curly (s)</i>				<i>Pointed heads (H) are dominant to round heads (h)</i>			
Ss	SS	ss	straight	HH	Hh	hh	pointed
Ss	SS	ss	curly	HH	Hh	hh	round