**Genetics Practice Problems**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**For each genotype below, indicate whether it is heterozygous (He) or homozygous (Ho)**

AA \_\_\_\_\_\_\_\_\_\_

Bb \_\_\_\_\_\_\_\_\_\_

Cc \_\_\_\_\_\_\_\_\_\_

DD \_\_\_\_\_\_\_\_\_\_

Ee \_\_\_\_\_\_\_\_\_\_

ff \_\_\_\_\_\_\_\_\_\_

Gg \_\_\_\_\_\_\_\_\_\_

HH \_\_\_\_\_\_\_\_\_\_

Ii \_\_\_\_\_\_\_\_\_\_

Jj \_\_\_\_\_\_\_\_\_\_

kk \_\_\_\_\_\_\_\_\_\_

LL \_\_\_\_\_\_\_\_\_\_

Mm \_\_\_\_\_\_\_\_\_\_

nn \_\_\_\_\_\_\_\_\_\_

oo \_\_\_\_\_\_\_\_\_\_

Pp \_\_\_\_\_\_\_\_\_\_

**For each of the genotypes below, determine what phenotypes would be possible.**

*Purple flowers are dominant to white flowers.*

PP \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pp \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

pp \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Brown eyes are dominant to blue eyes.*

BB \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

bb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Round seeds are dominant to wrinkled seeds.*
RR \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Short tails in cats are recessive to long tails.*

TT \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tt \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

tt \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**For each phenotype below, list the genotypes.**

*Straight hair is dominant to curly.*

*Use the letter H.*

\_\_\_\_\_\_\_\_ Straight

\_\_\_\_\_\_\_\_ Straight

\_\_\_\_\_\_\_\_ Curly

*Pointed heads are dominant to round heads.*

*Use the letter H.*

\_\_\_\_\_\_\_\_ Pointed

\_\_\_\_\_\_\_\_ Pointed

\_\_\_\_\_\_\_\_ Round