

Genetics Practice Problems - Simple Worksheet

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

- AA \_\_\_\_\_      Ee \_\_\_\_\_      Ii \_\_\_\_\_      Mm \_\_\_\_\_
- Bb \_\_\_\_\_      ff \_\_\_\_\_      Jj \_\_\_\_\_      nn \_\_\_\_\_
- Cc \_\_\_\_\_      Gg \_\_\_\_\_      kk \_\_\_\_\_      oo \_\_\_\_\_
- DD \_\_\_\_\_      HH \_\_\_\_\_      LL \_\_\_\_\_      Pp \_\_\_\_\_

2. 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 \_\_\_\_\_

*Bobtails in cats are recessive.*

- TT \_\_\_\_\_
- Tt \_\_\_\_\_
- tt \_\_\_\_\_

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

*Straight hair is dominant to curly. Pointed heads are dominant to round heads.*

- \_\_\_\_\_ straight      \_\_\_\_\_ pointed
- \_\_\_\_\_ straight      \_\_\_\_\_ pointed
- \_\_\_\_\_ curly      \_\_\_\_\_ round