

# Punnett Square Practice Worksheet

Name: .....

Use the following instructions for questions 1-3:

In rabbits, fur color is determined by two alleles.

- The dominant allele (B) codes for brown fur.
- The recessive allele (b) codes for white fur.

**1) The female rabbit is heterozygous.  
The male rabbit is homozygous recessive.**

Use a Punnett Square to predict the most likely phenotypic and genotypic ratio of the possible offspring.


- All offspring will have brown fur – 100% heterozygous.

**2) The female rabbit has white fur (bb). The male rabbit has brown fur (BB).**

Use a Punnett Square to predict the most likely phenotypic and genotypic ratio of the possible offspring.


- Phenotypic ratio: \_\_\_\_\_
- Genotypic ratio: \_\_\_\_\_

**3) The female rabbit is heterozygous.  
The male rabbit is heterozygous.**

Use a Punnett Square to predict the most likely phenotypic and genotypic ratio of the possible offspring.


- Phenotypes: 100% Long tails
- Genotypes: 100% Heterozygous (Ll)

**4) A female cat has a short tail (ll), and the male cat is homozygous dominant for long tails (LL).**

Use a Punnett Square to predict the most likely phenotypic and genotypic ratio of the possible offspring.


- Phenotypes: 3:1 (brown to white)
- Genotypes: 1:2:1 (BB to Bb to bb)