

PUNNETT SQUARE PRACTICE

WORKSHEET

Name: _____

Date: _____

Objective:

Use Punnett squares to study and practice how traits are inherited. Predict genotypes, phenotypes, and probabilities of offspring traits using given genetic crosses.

Trait: Tail Length in Mice

Long tails (L) are dominant over short tails (l)

Cross: Two heterozygous mice (Ll × Ll)

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- What percentage will have long tails? _____
- What percentage will have short tails? _____
- Genotypic ratio: _____
- Phenotypic ratio: _____

Study Challenge – Two-Trait Cross

A black-coated, short-tailed dog with genotype BbSs is crossed with a white-coated, long-tailed dog with genotype bbss.

- Complete a Punnett square for both traits (B and S)
- What are all possible combinations of coat and tail traits in offspring?
- What percentage of offspring could have black coat and short tail?
- What percentage could have white coat and long tail?