



Punnett Square Practice Worksheet



Name: _____

Class: _____

1) Coat Color in Male Dogs

In dogs, black fur (B) is dominant over brown fur (b).

a) Cross: Heterozygous black male (Bb) × Brown female (bb)

- What percentage of offspring will have black fur?
- What percentage will have brown fur?
- Genotypic ratio: _____
- Phenotypic ratio: _____

2) Floppy ears (F) are dominant over straight ears (f).

b) Cross: Homozygous floppy-eared male (FF) × Heterozygous floppy-eared female (Ff)

- What percentage of offspring will have floppy ears?
- What percentage will have straight ears?
- Genotypic ratio: _____
- Phenotypic ratio: _____

3) Tail Length in Male Dogs

Short tails (T) are dominant over long tails (t).

c) Cross: Two heterozygous short-tailed dogs (Tt × Tt)

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

4) Challenge Question

A black-furred, floppy-eared male dog (BbFf) is crossed with a brown-furred, straight-eared female dog (bbff).

- Complete the Punnett square for both traits (B and F).
- What are the possible coat and ear type combinations?
- How many puppies could have black fur and floppy ears?
- How many could have brown fur and straight ears?