

Lesson 6: Reproduction and Genetics

Name _____

Determining Genetic Possibilities for Combs in Chickens

Objective: Determine the relationship between dominant and recessive genes using the Punnet square.

Fill out a Punnet square to determine the genetic possibilities for the inheritance of combs in chickens.

Key Questions:

In chickens, a rose comb is dominant and a single comb is recessive. The gene for the rose comb is represented by R, and r represents the gene for the single comb.

1. What would the offspring be if a single comb male mates with a single comb female?

What is the genotypic ratio? _____

What is the phenotypic ratio? _____

2. What would the offspring be if a rose comb male mates with a rose comb female that is known to possess the single comb gene?

What is the genotypic ratio? _____

What is the phenotypic ratio? _____