

Punnett Square Practice Worksheet

Understanding the Punnett Square Method

Step-by-Step Guide:

1. **Identify the Parental Genotypes** – Write down the genetic makeup of the parents.
2. **Set Up the Punnett Square** – Create a 2x2 grid for monohybrid crosses (1 trait) or a 4x4 grid for dihybrid crosses (2 traits).
3. **Fill in the Alleles** – Place one parent's alleles along the top and the other parent's alleles along the side.
4. **Complete the Square** – Fill in the boxes by combining alleles from each parent.
5. **Analyze the Results** – Determine the genotypic and phenotypic ratios based on dominant and recessive traits.

	P	p
P		
p		

Flower Color in Pea Plants

- Purple (P) is dominant over white (p).
- Cross: Two heterozygous purple-flowered plants (Pp × Pp).
- Genotypic ratio: _____
- Phenotypic ratio: _____
- What percentage of offspring will have purple flowers?
- What percentage will have white flowers?