Punnett Square

Worksheet

For each problem, complete the Punnett square and write the genotypes and phenotypes of the offspring

1) Predict the genotypic and phenotypic outcome (offspring) of a cross between two heterozygous tall pea plants.

2) In pea plants, yellow peas are dominant over green peas. Predict the genotypic and phenotypic outcome of a cross between a plant heterozygous for yellow peas and a plant homozygous for green peas.

3) Predict the phenotypic and genotypic outcome (offspring) of a cross between two plants heterozygous for yellow peas.

4) In pea plants, round peas are dominant over wrinkled peas. Predict the phenotypic and genotypic outcome (offspring) of a cross between a plant homozygous for round peas and a plant homozygous for wrinkled peas.

5) Predict the phenotypic and genotypic outcome (offspring) of a cross between two plants heterozygous for round peas.

6) One cat carries heterozygous, long-haired traits (Ss), and its mate carries homozygous short-haired traits (cs). Uses a Punnett square to determine the probability of their offspring having long hair and the probability of their offspring having hair