



3. In minks, brown is dominant over silver-blue color. What offspring would you predict if you crossed a homozygous brown mink with a silver-blue mink?

4. What would the genotypic and phenotypic ratios of two  $F_2$  generation mink from the above problem be if they were crossed?

5. In humans, acondroplasia "dwarfism" (D) is dominant over normal (d). A homozygous dominant (DD) person dies before the age of one. A heterozygous (Dd) person is dwarfed. A homozygous recessive individual is normal. A heterozygous dwarf man marries a dwarf heterozygous woman. Give the genotypic and phenotypic ratios of the offspring

6. In humans, free earlobes (F) is dominant over attached earlobes (f). If one parent is homozygous dominant for free earlobes, while the other has attached earlobes can they produce any children with attached earlobes? Show punnett square to answer question.
7. In humans widow's peak (W) is dominant over straight hairline (w). A heterozygous man for this trait marries a woman who is also heterozygous. Give the genotypic and phenotypic ratios of the offspring
8. In pea plants, yellow seeds (Y) are dominant and green seeds (y) are recessive. A pea plant with yellow seeds is crossed with a pea plant with green seeds. The resulting offspring have about equal numbers of yellow and green seeded plants. What are the genotypes of the parents?

9. In pea plants, yellow seeds (Y) are dominant and green seeds (y) are recessive. In another cross, a yellow seeded plant was crossed with another yellow seeded plant and it produced offspring of which about 25% were green seeded plants. What are the genotypes of both parents?
10. In guinea pigs, short hair, (S), is dominant to long hair, (s). What are the genotypic and phenotypic ratios of a cross between a heterozygous short haired guinea pig with a long haired guinea pig.