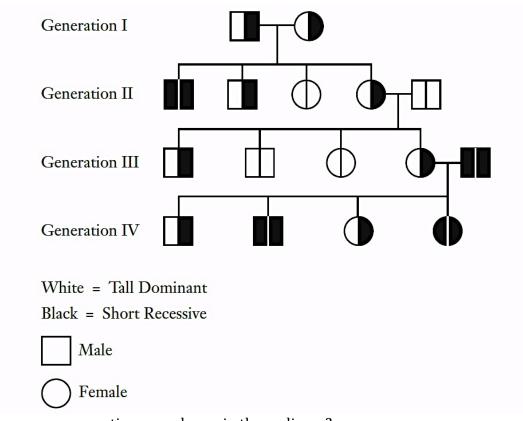
Warm-Up: Analyze the Pedigree

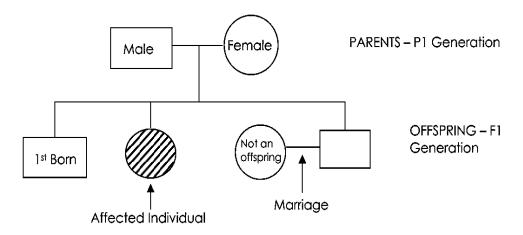
Below is a pedigree for a group of dogs. Some of the dogs in this group are tall, some are short. Some are tall, but carry the recessive short trait.



- 1. How many generations are shown in the pedigree? _____
- 2. How many offspring did the parents in the first generation have? _____
- 3. What does the square in generation **I** stand for? Why is it half-shaded? _____

- 4. Which dog was the first in the family to be short? _____
- 5. A female dog from generation **III** has four puppies. How many of these offspring carry the short trait? How many of the offspring are short?

A pedigree is a way of indicating generations of mating by using standard symbols:



 X^{N} = Normal X^{n} = red-green colorblindness (shaded in)

Using the above key, write the genotype and phenotype of each individual.

