

Laboratory Investigation

CHAPTER 3 ■ Human Genetics

Reading a Human Pedigree

Problem

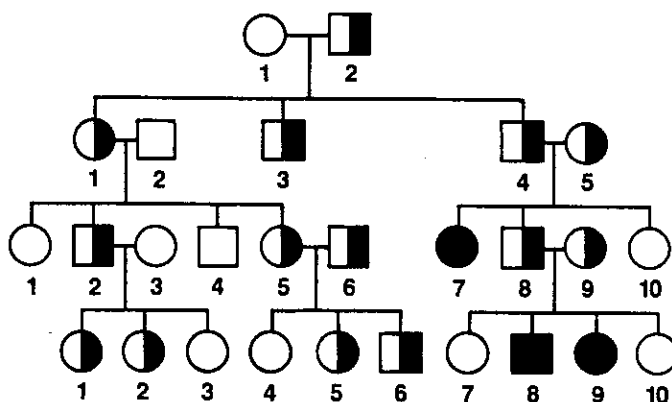
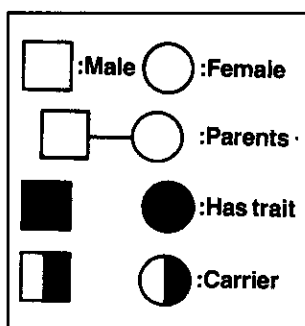
How can you use a human pedigree to trace the inheritance of sickle cell anemia through several generations of a family?

Materials

paper
pencil

Procedure

1. Study the following key for the symbols used on a human pedigree.
2. Study the pedigree shown here. This pedigree traces the pattern of inheritance of sickle cell anemia in several generations of a single family.



Sickle Cell Anemia Pedigree

Observations

1. How many generations are shown on the pedigree? _____
2. Which parent in the first generation had sickle cell anemia? _____
3. How many children were born in the second generation? _____
4. How many of these children are carriers of sickle cell anemia? _____
5. How many children in the third generation have sickle cell anemia? How many are carriers? _____