

A6

Interpreting Information in a Pedigree

Background

Organizing information is often the key to solving a problem. Tracing the hereditary characteristics over many generations can be especially confusing unless the information is well organized. In this activity, you will learn how to organize hereditary information, making it much easier to analyze.

Objectives

In this activity you will

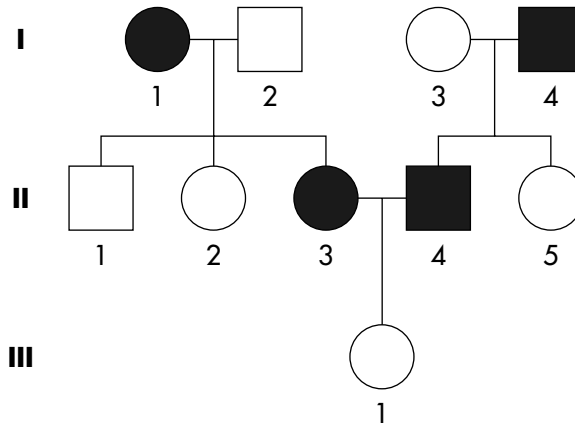
- **construct** and **analyze** a pedigree.

Materials

- paper
- pencil

Preparation

1. Pedigree I traces the dimples trait through three generations of a family. Blackened symbols represent people with dimples. Circles represent females and squares represent males.



Pedigree I

Procedure

2. The following passage describes the family shown in Pedigree I.

Although Jane and Joe Smith have dimples, their daughter, Clarrisa, does not. Joe's dad has dimples, but his mother, and his sister, Grace, do not. Jane's dad, Mr. Renaldo, her brother, Jorge, and her sister, Emily, do not have dimples, but her mother does.

3. Write the name of each person below the correct symbol in Pedigree I. How are marriage and offspring symbolized? What do the Roman numerals symbolize?

4. Make a pedigree based on the following passage about freckles.

Andy, Penny, and Delbert have freckles, but their mother, Mrs. Cummins, does not. Mrs. Giordano, Mrs. Cummins's sister, has freckles, but her parents, Mr. & Mrs. Lutz, do not. Deidra and Darlene Giordano are freckled, but their sister, Dixie, like her father, is not freckled.

Analysis

1. **Evaluating Techniques** What advantages does a pedigree have over a written passage?

2. **Summarizing Observations** How does a pedigree organize hereditary information, making it easier to understand?
