**Teacher Notes**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    Date \_\_\_\_\_\_\_\_\_\_\_\_\_    Class \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Try This Activity**

**Coin Crosses**

Class Time:   15 minutes

**Difficulty:** L1 (Basic to Average)

Skills Focus:   Interpreting data

**Materials**

2 coins, masking tape, scissors

**Procedure**

Here’s how you can use coins to model Mendel’s cross between two *Tt* pea plants.

1. Place a small piece of masking tape on each side of two coins.
2. Write a *T* (for tall) on one side of each coin and a *t* (for short) on the other.
3. Toss both coins together 20 times. Record the letter combinations that you obtain from each toss.

**Interpreting Data**How many of the offspring would be tall plants? (*Hint:* What different letter combinations would result in a tall plant?) How many would be short? Convert your results to percentages. Then compare your results to Mendel’s.

**Expected Outcome**

5 *TT,* 10 *Tt,* 5 *tt;* All plants that are *TT* and *Tt* will be tall, approximately 15, or 75%. All *tt* plants will be short, approximately 5, or 25%. Some students might observe that their results are similar to Mendel’s results.

**Extend**

Let students toss both coins another 20 times and observe whether their percentages are closer to Mendel’s results.

Learning Modality: logical/mathematical