

Teacher Notes

1. Middle school students should develop their own working definitions for necessary vocabulary by conducting the investigation. A class discussion of the terminology after the exploration phase is also appropriate.
2. Counters will need to be labeled with the grease pencil. Label only as many counters as you will need for this activity. For the first activity, label each counter with a capital letter "B" on one side and a lower case "b" on the other side. The letters "B" and "b" represent the two alleles. The capital letter "B" represents a dominant trait and the lower case letter "b" the recessive form of the same trait. As an alternative, a sheet of labels is provided at the end of this inquiry.
3. For the "Predicting Gender" activity label each counter with a grease pencil. Label only as many counters as you will need for this activity. Label one counter with an "X" on both sides. Label the other counter "X" on one side and "Y" on the other. The "X" and "Y" represent the sex chromosomes. The gender of the offspring will be determined by the flipping the two counters. A female is represented by "XX" and a male is represented by "XY".

Equipment

- One coin (school supplied)
- 1 container of two color counters (double-sided)
- 16 grease pencils
- Probability of Offspring class data chart overhead transparency
- Directions for Probability overhead transparency

Activity Sheets



Make sure you have copied the activity sheets for this inquiry.

- Activity One: Probability
- Activity Two: Predicting Gender
- Activity Three: Focus Questions for Probability