Focus Areas: Pest Control: Mechanical; Science, Language Arts
Focus Skills: thinking critically and creatively, comparing and contrasting, solving problems, interacting cooperatively, listening to learn information, speaking orally

Objective

To investigate the criteria for a successful trap

Essential Question

What is needed to make an effective trap?

Essential Understanding

Before you build a trap, you have to learn about the creature you are trapping! A successful trap:

- must be the right size
- must use the right bait
- must provide no way to escape
- must be placed in the right location
- may need to hold, but not harm the creature

Background

Traps are mechanical devices used in pest control. Whether capturing mice or insect pests, the criteria for a successful trap are the same. The trap must be large enough to attract the prey, hold it captive, and finally prevent its escape. The correct location of the trap is also important.

The principles and purpose of traps can be discussed within the context of “Let’s pretend.” Designing a trap will delight the children while providing opportunities for both critical and creative thinking.
Unit 5 Section 2 Lesson 2: Snap the Trap

Vocabulary

bait a color, smell, or thing that will attract the desired prey

mechanical control a device (thing) and/or physical action used to control someone or something

prey the creature being hunted

trap a mechanical device (thing) used to capture prey

Logistics

Time: three 30-minute sessions

Group Size: 5 to 30

Space: an area for comfortable seating and a work area for teams of two or three

Materials

Izzy puppet *

Supplement: Fact Sheets on ants, cockroaches, and mosquitoes *

drawing materials

chart paper or comparable surface for large print display

computer access

* single copy provided

Preparation

1. Read the Background section.
2. Gather art supplies.
3. Gather books and website addresses on targeted pests.
Activity

Introduction

Session #1

Using the Izzy puppet to talk with the children, discuss the vocabulary word TRAP.

a. What is a trap?
b. For what are traps used?
c. Brainstorm what makes a GOOD trap. [size, what’s used as bait, escape-proof, location, (and, if children are developmentally ready) Hold vs. Harm]
d. As each criterion is mentioned, print it on the display board.

Involvement

Session #2

1. Display the criteria from yesterday’s discussion.
2. Tell the children they are going to design (draw) either a mosquito, an ant, or a cockroach trap.

a. Divide the group in half.
b. Divide each sub group into cooperative teams of two or three.
c. Allow time for the groups to research the life styles of their chosen pest. Remind them that understanding the targeted pest’s life style is the first step in IPM.

3. Compare and contrast possible baits, correct trap size, how to make sure the pest can’t escape, and where to place the trap.

Note: Izzy may be used to lead this discussion.
Session #3

1. Provide drawing materials and have the children formulate a plan for their trap.
2. Share designs, discuss rationale, and display plans.

Follow Up

1. At home, any children who wish to may actually create the trap according to their plan and test it.
2. Read the specifications on commercial non-chemical traps and compare them the groups’ original designs.