Focus Areas: Pest Control - Cultural; Science, Language Arts
Focus Skills: critical thinking, decision making

Objective

To recognize that clothing choices can protect a person from pests

Essential Question

What can I do to avoid being a lunch for ticks, fleas, mosquitoes, and lice?

Essential Understanding

The way I dress can help protect me from creatures that want me for lunch.

Background

Several members of the phylum Arthropoda, which includes Insects and Arachnids, use warm-blooded animals for their food supply. Among these are mosquitoes, lice, fleas, and ticks. Some are merely annoying; others cause diseases. Vigilance, careful cleaning, and appropriate dress are all methods of mechanical or cultural/social control that can reduce the harm done by these pests. The focus of this lesson is mosquitoes, but other biting insects are involved.

Vocabulary

Arthropods: animals with segmented bodies, exoskeletons, and jointed limbs, such as insects, spiders, mites

cultural/social controls: health habits that can reduce pest problems

host: a plant or animal that another plant or animal lives on

mechanical controls: tools or materials used to prevent pest damage
Logistics

**Time:** 30 minutes  
**Group Size:** 5 to 30  
**Space:** an area for observation and comfortable seating

Materials

Izzy puppet *  
Overhead 1 “Which Child is Dressed for SAFE Outdoor Play?” *  
Handout 1 “Protect Yourself” *  
copy of the *IPM Song* *  
picture of poison ivy from weed picture cards *  
samples of construction paper, both light and dark colors  
black/white board or chart paper

* single copy provided

Preparation

Read the **Background**.  
Make copies of Handout 1 (one per child).

Activity

**Introduction**

1. Reintroduce Izzy the praying mantis:  
   **SCRIPT:** Hi, boys and girls. Do you remember me? (Izzy)  
   Today we’re going to investigate some of my relatives who really are PESTS to you and your pets. If you’ve ever had a mosquito bite, stand up! That’s 100%!! (If not all children stand, you should adapt your response.)

2. Use the puppet to ask the following questions:  
   What happens when a mosquito bites you?  
   What other pests can make you or your pets itch and want to scratch? (fleas, lice)  
   Why do these insects bite you and your pets? (They drink blood for food.)  
   Can anyone think of another pest who uses blood for food? (tick)  
   **Note:** If the children have difficulty with this, lead them by giving hints: they hook on, they’re hard to get off, etc.
Activity

Introduction (continued)

3. As each pest is mentioned, print its name so the group can see it.

4. How are all these pests alike? (They feed on blood.)

5. Does anyone know a plant that can make you itch? (poison ivy, poison oak, poison sumac)

Involvement

1. Izzy tells the group, “We are going to become IPM detectives and learn what we can do to control mosquitoes!”
   a. “The first step is to name the pest. What pest do we want to control?” (mosquitoes)
   b. “The next step is to learn all we can about this pest!”
      “What are they?” (insects)
      “What do they look like?” (Draw on the board as volunteers describe.)
      “What do they eat?” (blood)
   c. “Since mosquitoes feast on blood, how should you dress to protect yourself from mosquitoes?”

2. Show Overhead 1, “Which Child is Dressed for SAFE Outdoor Play?” Ask the group which outfit would be best to protect them from mosquitoes. (long sleeves and pants)

3. Izzy adds, “Wearing clothes that cover your skin protects you from mosquitoes and TICKS!” Did you know color makes a difference too? Repeat after me:
   “To protect yourself from mosquito bites (the children repeat)
   “Don’t wear dark colors, choose the light!” (the children repeat)

4. Discuss with the children what colors are light and dark using construction paper squares.

5. Ask the children if this same clothing would help protect them from ticks. (Yes) Poison ivy? (Yes, but color doesn’t matter.)
Activity

Involvement (continued)

6. Izzy says, “Speaking of poison ivy, can anyone tell me what that pest plant looks like?” Allow time for the children to offer their ideas, and then show the children pictures of the plant. Izzy recites the following warning and the children repeat.

“Leaves of three, let it be!”

7. Sing verse 7 of the IPM Song with Izzy (tune “If You’re Happy and You Know It”)

   Izzy: When mosquitoes buzz and bite...IPM (children repeat)

   Izzy: When mosquitoes buzz and bite, make sure that you're dressed right!

   ALL: That's the better way, use IPM! (Children repeat)

Follow Up

1. Distribute paper dolls and clothing sheets. (Handout 1)

2. Have children choose what their doll should wear to play in the yard and protect against mosquitoes, ticks, and poisonous plants. They may circle the clothing they chose and color only those pieces of clothing!

3. Izzy reminds the children that when they have been playing outside, they should always ask an adult to check for ticks as soon as they come inside. They can check for ticks on outside pets too, but they should never try to take ticks off by themselves.

4. Izzy says, “Ticks everywhere
   Be aware.
   A check for ticks,
   Will do the trick!”