



Lesson 2: Pesky Pests and Household Hazards

Snapshot

This lesson examines environmentally friendly ways to keep our homes and schools pest-free. We define pests, pesticides, household hazards, chemicals, and toxic, and explores strategies for keeping common household hazards out of reach.

Preparation and Materials:

- Posters 1–3, Visual Cards 1–5, Household Hazards Hunt Handout, Take-Home Talk
- Poison Control stickers (*call your local poison control center to receive these*)
- Flip chart and markers
- Black or white board
- Large sheets of paper for each child to make a poster
- Markers or crayons
- Select up to five students to read and speak in front of the class

Suggested Giveaways: Poison Control stickers or magnets

Objectives—Students will be able to:

- define *pests, pesticides, household hazards, hazardous, and toxic*;
- list the steps to take if you ingest or touch a household hazard; and
- name three household pests and explain how to safely get rid of them.

Vocabulary: pests, pesticides, household hazards, chemicals, toxic

Procedure:

1. Introduction (*8 minutes*)
2. Define Vocabulary—Pests, Pesticides, and Household Hazards (*5 minutes*)
3. Safely Getting Rid of Pests and Pest Detectives Activity (*15–25 minutes*)
Optional Activity: Pest Free Poster Creation (*10–15 minutes*) *Note: If you do the Pest Free Poster Creation, you can end the lesson there and pick it back up in the next session.*
4. Keeping Household Hazards Out of Reach and Find the Household Hazards Activity (*5–15 minutes*)
Optional Activity: Creating Household Hazards Warning Signs (*10 minutes*)
5. Close and Take-Home Talk (*5 minutes*)



Lesson 2: Pesky Pests and Household Hazards

1. Introduction

(8 minutes)

Review

Review previous lesson: Ask several students to share something that they remember from the previous lesson.

Prompts: What did you learn that you didn't know before? What did we talk about that you already knew? What surprised you from our last lesson? What are some of the new words that you learned from our last lesson? What can you do to positively impact the issue we learned about?

Do

[Show **Poster #1** (photographs of mouse, housefly, raccoon, aphids, roach, rat, mold, and ant).]

Ask

What are these things? What do they have in common? What else do they have in common? Which ones are most like each other?

Prompts: All are alive; all need air, water, food, and shelter; sometimes these living organisms are where we don't want them to be (e.g., in our homes!).

Ask

All of these are commonly called household pests. What is a pest?

Prompts: Are they alive? Do we like them? Why not? Why might they be a problem for us?

Explain

Pests are living things that can hurt us by making us sick, damage our homes or other property, or destroy plants or agricultural products. Pests are everywhere—in our schools, homes, and our cities, suburbs, and in the country. There are pests in the White House, in the Empire State Building, and in *[insert celebrity's name]*'s home.

Ask

Why do you think they want to get into our homes and schools?

Prompts: What do all living beings need to survive? If you've got water and food and shelter, pests may try to hang out with you.

(continued on other side)

1. Introduction *(continued – page 2)*

Explain

A pest is any living organism that annoys humans or causes damage to people, their health, or their property. In nature, there are no pests, just different types of relationships, such as predator and prey or parasite and host. A pest can be a plant, an animal, or a disease. Insects are just one kind of pest that people may encounter. The world has more insects than all other living things combined. It's estimated that there are 10 quintillion (10,000,000,000,000,000,000) insects alive at any one time! Now, not all of them are pests. In fact, less than 1 percent of all insects are considered to be pests.

Do

[Write 10 quintillion (10,000,000,000,000,000,000) on the board or flip chart and then ask the students for other numbers to compare it to so that the students can see how massive this number truly is. Try numbers such as 100, 1,000, 10,000, or 1,000,000.]

Do

*[Show **Poster #2** (Earth divided into insects, mammals, and other animals).]*

Ask

Have you heard the saying “Beauty is in the eye of the beholder?” What does it mean?

Prompts: Does everyone agree when something or someone is beautiful?

Explain

We all have different ideas about what is beautiful. Well, pests can also be beautiful in the eye of the beholder. What we think of as pests—roaches, mice, and raccoons—might not be pests to everyone or at all times or in all settings.

Ask

When is a pest a pest? If you're in a different environment, or you're a different animal, might these things be good to have around? When would one of these household pests not be considered a pest?

Prompt: What if you're an owl and you're hungry—would that mouse be a pest or lunch? What if you're in a forest with fallen trees—would that termite be a pest or just part of the life cycle?

Explain

So, while these may be pests to us, in another environment and in another situation, they are just part of the food chain or a life cycle, or may actually be beneficial. Now we're going to focus on how to keep our homes pest-free.



Lesson 2: Pesky Pests and Household Hazards

2. Define Vocabulary: Pesticides, Household Hazards, Hazardous, and Toxic (5 minutes)

Ask

What are the best things that we can do to help keep our homes and schools pest-free?

Prompts: Keep these places clean, tidy, and in good repair.

Explain

Even when we keep our homes and schools clean and tidy, pests can still get in. For example, roaches and mice can come in through cracks and crevices, or even walk under the front door. Everyone has to deal with pests at some point in his or her life.

Ask

How can we prevent pests from coming in? What do we do when pests come in? How do we get rid of them?

Prompts: Insect spray, roach spray, mouse poison, exterminator, plug up holes where they are getting in, repair leaky pipes and faucets, keep things clean and clutter-free.

Explain

Some of the things that you mentioned that get rid of pests have chemicals in them. These products are called **pesticides** and they are used to kill or repel pests. More often, we can use a little bit of planning to prevent pests from getting in to begin with; then, we won't need to use pesticides at all!

Ask

Why might it be better to get rid of pests without the use of pesticides?

Prompts: Some chemicals may negatively impact human health; they often smell bad; they can be expensive; and they may be ineffective, especially if not used properly. These chemicals can also hurt the environment and cause harm or kill non-targeted plants or animals. There are easier ways to get rid of pests that we'll learn about in a moment.

(continued on other side)

2. Define Vocabulary *(continued – page 2)*

Explain

If a pesticide is strong enough to kill pests, do you think that it might be strong enough to hurt you, too? Some of these products are **toxic** and can be hazardous if we accidentally spill them; breathe them in; or get them on our fingers, in our eyes, or in our mouths. Things that are hazardous or toxic can hurt us as we develop and grow. Remember that hazardous chemicals and toxic products can especially impact children since kids are developing and growing at a much faster rate than adults.

Do

[Act these out.] While you might not be interested in tasting window cleaner, do any of you have little brothers or sisters, cousins, or neighbors who put everything in their mouths? Or do you know small children who spend a lot of time crawling on the floor or getting into drawers and cabinets? Have you ever used a chemical, such as an antibacterial cleaner or insect spray, and accidentally breathed some in? Did it make it hard to breath or make your eyes water? Could you “taste” it in the back of your throat?

Ask

A lot of these pesticides are hazardous and/or toxic. What does **hazardous** mean? What does **toxic** mean?

Explain

Hazardous means that the item is dangerous if used in the wrong way. **Toxic** means that something is poisonous or deadly if you’re exposed to it at certain concentrations. So, let’s talk about how we can prevent the pest problem rather than trying to stop an infestation by using a pesticide that might also hurt us.



Lesson 2: Pesky Pests and Household Hazards

3. Safely Getting Rid of Pests and Pest Detectives Activity (15–25 minutes)

Explain

In order to prevent a pest problem or to rid our homes or schools of pests, we need to use what we know about the pests and we need to think like the pest. We need to plot and plan.

Ask

Ask one student to volunteer to be a pest and another student to volunteer to be a pest detective. At the front of the room, give the detective **Visual Card #1** (*Detective Card*) and the pest **Visual Card #2** (*Mouse Pest Card*). Tell the students to review their cards quickly. Tell them not to tell the class what the pest is. Tell the students that they will need to get into character and really think and act like a pest and a detective, respectively. Ask the student playing the pest what he/she would like his/her name to be. Ask the detective the same question.

Optional Activity: There are a total of four Pest Cards (Mouse, Cockroach, Ant, and Fly). You can decide to do just the Mouse or you can do several Pest Cards at the same time or one after the other.

Explain

Here's the situation. Detective *[insert name]* has been called in because we have a pest in our space. We've seen some signs of a pest, but we're not sure what kind of pest it is or how to get rid of it. The detective is going to help.

Ask

If you have a pest in your home, what's the first thing that you need to know? You have to know what you're dealing with, right? **Step 1: Properly identify the pest.**

Ask

Why do we need to know what kind of pest it is?

Prompts: Would we treat a roach and a termite infestation in the same way? A mouse and a raccoon infestation in the same way?

Ask

So, let's ask the detective, What have you observed about the pest? *[Detective uses Visual Card #1 to answer.]*

(continued on other side)

3. Safely Getting Rid of Pests and Pest Detectives Activity *(continued – page 2)*

Explain

So, the detective has used his/her powers of observation and interviewing people to get some answers.

Ask

What type of pest do we think this is?

Answer: A mouse. How do you know it is a mouse? Gnaw marks? Nibbled food? Feces? Mice sightings? Smell?

Explain

So, we know that we have a mouse because the detective has observed clues that lead us to a mouse, right? Since we have the mouse right here, let's interview *[him/her]*.

Ask

Mouse, why are you in our space? *[Mouse uses **Visual Card #2** to answer.]*

Ask

What four things do all living beings need to survive? *[Air, water, food, and shelter.]*
Which of these four needs is the mouse getting from our space? *[Air, water, food, and shelter.]*

Ask

What happens if you take away something that the mouse needs? Would our space still be an attractive place to be?

Prompts: The mouse would need to look elsewhere in order to meet its needs.

Explain

Step 2: Take away food and **Step 3: Take away water.**

Ask

How would we do that?

Prompts: Store food in hard plastic or glass containers with tight-fitting lids, or in the refrigerator; clean up crumbs and spills when they happen; don't walk around the house eating food, eat only in the kitchen; use a trash can with a tight-fitting lid and take it out as needed; tell your parents about dripping faucets and pipes that need to be repaired; keep surfaces clean and dry; put away pet food when the pet isn't eating.

Ask

Mouse, what would you do if we took away these things?

3. Safely Getting Rid of Pests and Pest Detectives Activity *(continued – page 3)*

Ask

What if we took away one more thing? What is it? **Step 4: Take away their hiding places/shelter/entrance place.** How would we take away shelter?

Prompts: Fill in holes, cracks, and crevices (a mouse can fit through a hole the size of a pencil). Investigate how the mouse got into the building. Get rid of clutter such as piles of papers or clothing. Keep things tidy.

Explain

Finally, after taking all these steps we want to make sure they worked. **Step 5: Monitor the situation.** We need to watch to see if the pest returns. If the pest returns, we want to go back and make sure steps 1–4 were done correctly.

Do
Explain

*[Show **Poster #3 (Steps).**] By taking these steps:*

1. **Identify the pest,**
2. **Remove food,**
3. **Remove water,**
4. **Take away shelter,** and
5. **Monitor the situation**

you're encouraging the pest to move on and find somewhere else to live. These steps might not always work, but it is important to get rid of those things that pests need to survive first. That way, you might not have to use pesticides that can hurt you and the environment.

Explain

We can use the same steps that we used to get rid of the mouse in our space to get rid of pests in our homes.

Optional Activity: Pest Free Poster Creation *(10–15 minutes)*

Explain

Optional Activity: Now that we know how to keep our spaces clean, we want to advertise to pests and to everyone else that this is a pest-free place. This will also help teach other people how to keep pests away. Each of you (or in pairs) will make a poster that announces this is a pest-free space. Remember to include the three ways we keep pests away on the poster.

Do

[Pass out large sheets of paper and markers or crayons.]



Lesson 2: Pesky Pests and Household Hazards

4. Keeping Household Hazards Out of Reach and Find the Household Hazards Activity

(5–15 minutes)

Explain

Some situations may require the use of pesticides even after we've gone through all of the preventative and nontoxic steps.

Ask

When do we use these pesticides and chemical cleaners? What can we do to make sure that they are used safely? Should children use them?

Prompts: Young children shouldn't use these products. Use products that are the least toxic and the most specific for the situation. Parents should read the label and use accordingly. Keep these products locked up, up high, and out of reach of children.

Do

Break the class up into five groups and give each group a copy of the **Household Hazards Hunt Handout**. Ask each group to find the household hazards in each picture. For each hazard that they identify, they should also determine a way to make it safer.

Explain

It's important to keep these household hazards out of reach so that children (ourselves included) don't accidentally touch them, breathe them in, or drink them.

Ask

If you accidentally touch or drink a pesticide or a household chemical, what should you do?

Prompts: Tell an adult and call the poison control center at 1-800-222-1222, or call 911.

Ask

Who knows what the Poison Control Center does?

Prompts: There are Poison Control Centers all over the country and you can call them 24 hours a day.

Explain

If you accidentally swallow an adult's medicine or your little brother or sister accidentally drinks some of the cleaners we saw in our Household Hazards Hunt, you can call a Poison Control Center and they will be able to tell you if you should go to the hospital or not.

(continued on other side)

4. Keeping Household Hazards Out of Reach *(continued – page 2)*

Optional Activity: Creating Household Hazards Warning Signs *(10 minutes)*

Explain

We want to be sure we keep what we learned in mind when we're at home, so we're going to create flyers to bring home that remind us to keep household hazards out of reach of kids and who to call if someone accidentally uses a household hazard product incorrectly.

Do

[Pass out large sheets of paper and markers or crayons.]

Ask

What are some good reminders about what we just learned?

Prompts: Kids shouldn't touch cleaners. If a cleaner spills, let an adult know; keep cleaners and other household hazards out of reach.

Do

[Pass out Poison Control stickers.]



Lesson 2: Pesky Pests and Household Hazards

5. Close and Take-Home Talk

(5 minutes)

Do
Explain

Close your eyes and take a nice deep breath. We've covered a lot today. We talked about pests. Raise your hand if you know what a **pest** is. *[Call on a student to give the definition.]* We talked about **pesticides**—chemicals and cleaners that kill or repel pests—and learned that some can be **hazardous** and/or **toxic**. We also talked about how we can make our homes and our space a less inviting place for pests to live.

Ask

You can open your eyes now. What is the first thing that the detective did when we thought that we had a pest?

Answer: 1. Identify the pest. You have to know what kind of pest it is first.

Ask

Our mouse told us that this space was a nice place to live because it had what it needed to live. What three things was it looking for?

Answer: Food, water, and shelter.

Explain

When we are using our plot and plan method to get rid of pests instead of using pesticides, we want to make the environment undesirable for pests. So, we take away their food and water and shelter. Finally, we talked about how to stay safe from household hazards by locking them up and putting them up high where they are out of reach.

Take-Home
Talk

The coolest part about learning something new is sharing the knowledge. Tonight, when you get home, I want you to talk with your family about the things that we learned today. What do we need to do to make our homes pest-free? Look for clues about which pests may be in your home. What can you do to safely eliminate them? Discuss this with your family.

Do
Explain

*[Pass out **Take-Home Talk**.]* This Take-Home Talk Sheet has some things that you can share with your family and some activities that you can do at home. See what you can accomplish on the sheet and we'll talk about it the next time we meet.