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# Pesticide Safety Games

## for Grades K-6

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# **TEACHER BACKGROUND INFORMATION**

## **AGRICULTURAL PESTICIDES**

### **Teacher Background Information**

#### ***What are they?***

Agricultural pesticides are intended for outdoor use to aid in the production of crops. Many of these pesticides are restricted for use by applicators who are specifically certified to handle them. These products are toxic and their use in residential settings is illegal.

#### ***Who uses them?***

In the early 1980's, agricultural pesticides began to find their way from the farm to urban settings. Unscrupulous applicators used these outdoor-pesticides indoors as a cheap and effective way to deal with cockroaches and other pests. To date, this illegal practice has caused serious health problems and millions of tax-payer dollars devoted to testing and cleanup of contaminated homes and businesses.

#### ***Why are they dangerous?***

Non-certified users obtain agricultural pesticides from a variety of unregulated sources including: street vendors, flea markets, family members, and friends. Because these vendors typically fail to provide the original pesticide container, the pesticide often is stored in used food and beverage containers without proper labeling. This can result in accidental poisoning.

#### ***What's being done about it?***

To prevent the future use of agricultural pesticides in urban settings, the Environmental Protection Agency (EPA) is engaging in a broad outreach effort to raise awareness of the dangers of illegal use of agricultural pesticides for indoor pest control. This curriculum is part of that effort. In addition, EPA is interested in assuring that all pesticides, even those legally purchased for home usage, are used safely. Consequently, this curriculum has been developed to introduce children to the concepts of pests, beneficial plants and animals, pest prevention, tools that help control pests, and the safe handling of pesticides.

## **INTRODUCTION TO THE GAMES**

## **Introduction to the Games**

### ***Picking the appropriate game***

This curriculum offers 2 levels of games with multiple variations.

The Beginner Level Game, bingo, can be modified to meet the different skill levels of students in grades K-6.

The three Advanced Level Games take into account the difference in the maturity level and cognitive abilities of 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> graders, and offers a more challenging format. These games expand on the bingo premise to allow for more student interaction and presentation activities. Teachers will need to decide which game and variations are appropriate for their students.

### ***Beginner Level Game - Bingo***

This game follows the rules of traditional bingo. It is appropriate for all levels of K-6 students. In the lesson plan for this game, we offer variations that teachers can employ to tailor the game to the capabilities of their students. For example, teachers may choose to have less experienced students work together in teams rather than independently, so that they can pool their resources to come up with the correct answer. Another variation allows for more student participation. For example, students may advance from bingo player to bingo caller either by teacher selection or by winning the previous bingo game.

### ***Advanced Level Games - Scramble, Match Game, and Pesticide Tales***

Appropriate for most students in grades 4-6, these three activities require students to match descriptive text cards with their matching picture cards. While this game is based on the bingo premise, it allows for greater student interaction and minimizes teacher involvement.

This is an excellent exercise for promoting independent thinking and for practicing language and interaction skills. Similar to Beginner Bingo, the recommended variations allow the teacher to customize the activity to match students' abilities. One variation in particular utilizes writing and presentation skills as students are tasked with producing stories, plays, and posters.

### ***Considerations***

These kinds of activities are inherently noisy and unstructured. They are best suited to a closed classroom or outdoors where the noise will not bother other classes. Student maturity and self-control also should be considered. As it would be quite easy to cheat at this game, students should be encouraged to enjoy the challenge rather than seeking the quick solution.

## **UNIT INTRODUCTION**

**UNIT INTRODUCTION**  
**To be used with the graphics to introduce the topic**

**Theme:** Pests

**Concept:** There are many kinds of pests that can invade our homes.

These include animals and insects that can bite and spread disease, such as:

the long-tailed, four-legged rat,  
the cockroach that crawls on six legs,  
flying insects such as mosquitoes,  
fleas that live on dogs and cats,  
head lice that live in your hair and make your head itch.

While a termite probably won't bite you, this six-legged pest likes to eat the wood that your house may be made of.

Plants and animals found outside your house also can be pests.

Poison ivy is a 3-leafed plant that makes you itch.  
Weeds are another kind of pest because they grow even where you don't want them.  
Moths like to eat sweaters and scarfs made of wool.  
A slug looks like a snail without its house. It eats plants, flowers, and vegetable gardens.

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**Theme:** Plants and Animals that Help Control Pests

**Concept:** Nature has its own way to control pests.

**Pest eaters:**

Owls hunt mice and rats.  
Some pests eat plants. Bugs such as the red and black ladybug eat these pests.  
Bats are another type of insect-eater, with fur and wings.  
By using their web to catch flies, spiders turn pests into food.  
Frogs are animals that live in ponds and use their tongues to catch insects.  
With its skinny body and long wings, a dragonfly can catch and eat as many as 1,000 mosquitoes a day.

Chips and blocks made from cedar trees are often used to repel moths.



## UNIT INTRODUCTION (continued)

**Theme:** Prevention

**Concept:** The best way to deal with pests is to avoid attracting them in the first place. The most important thing to remember is that pests need 3 things to live -- food, water, and a hiding place. Keeping your home, and especially the kitchen, clean and tidy will help. With these concepts in mind, here are a few things you can do to keep pests away:

### **Hiding places:**

Pests like to hide behind appliances and in cracks and crevices. Ask a grownup to close and seal these areas to keep pests from making a home in them.

Pests can also get into the house by walking through gaps under doors. Ask a grownup to close any gaps to keep pests out.

Use window screens and keep them in good condition to keep flies and mosquitoes from flying into the house.

Don't leave newspapers and dirty laundry lying on the floor. Pests love to hide in them. Keep trash cans closed and empty them often.

### **Food:**

Don't leave leftovers such as pizza, burgers, fries, and open cans of soda lying around. When you have finished eating, store leftovers in the refrigerator or throw them away. Wash dirty dishes and clean countertops soon after you eat.

### **Water:**

#### *Inside the house*

Don't leave containers of water out. Pests need to drink water as much as we do and open containers will invite them into your home.

Ask a grownup to fix leaky pipes to keep pests from drinking from them.

#### *Outside the house*

Standing water gives pests a drink and provides mosquitoes a place to lay their eggs. To prevent this, dump water out of tires, buckets, bottles, and other places where it can collect.

Cleaning up your cat's and dog's waste can help keep pests away.

## UNIT INTRODUCTION (continued)

**Theme:** Tools that help control pests  
**Concept:** Sometimes nature alone doesn't keep pests from getting into our homes and gardens. When this happens, we need to look for safe tools that can help.

Inside the house, these tools include:

Sticky fly paper that traps insects when they land on it. These can be hung from the ceiling.

Mouse traps can be set anywhere mice might hide: in closets, behind the refrigerator, or in cabinets. **[Note to teachers: Emphasize that these must be kept out of reach of children and pets.]**

Placing roach traps or bait stations behind stoves and refrigerators will help control roaches. **[Note to teachers: Emphasize that these must be kept out of reach of children and pets.]**

A fly swatter is a good tool for getting rid of flying insects.

Outside the house:

A gardening tool such as a hoe can be used to get rid of weeds.

A lawn mower can be used to cut grass and weeds and to eliminate a hiding place for snakes and other pests.

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**Theme:** What is a pesticide and how do I handle it safely?  
**Concept:** Sometimes, even though you've done everything you can to keep pests away, they still get into your house and garden. If all the things we've talked about before don't work, it may be time for a grownup in your house to use a pesticide.

A pesticide is a poison that kills pests.

Pesticides are dangerous and should be kept away from children, especially babies.

Children should never use pesticides.

Grownups should always buy pesticides in a store and never on the street from a stranger.

To make sure the pesticide is used correctly, grownups should always read the label and follow the directions.

Grownups should always keep pesticides in the container they came in. Pesticides should never be poured into another container, such as a milk jug, a peanut butter jar, or a soda bottle, where it can be confused with food or drink.

Pesticides should be locked in a cabinet when they are not being used.

Pesticides should never be kept under the sink or in a low cabinet, where babies and pets can reach them.

## UNIT INTRODUCTION (continued)

- Theme:** How can I protect myself and those around me from pesticide poisoning?
- Concept:** Pesticides are poisons and can be harmful to people. You should be aware of the different signs that warn you of danger.

Farm pesticides should never be used inside the house.

If you see a pirate sign with a skull and crossbones on any kind of container, it means that whatever is inside is dangerous and shouldn't be touched.

Just like the pirate sign, the Mr. Yuk sticker on a container means that you shouldn't eat, drink, or smell whatever is inside.

If you see a warning sign that says "danger," "danger-poison," or "danger-do not enter," walk away from the area.

If pesticides are misused, people can get sick.

Sometimes farmers spray their plants with pesticides to keep pests from destroying them.

For this reason, fresh fruits and vegetables should be washed before eating.

If someone swallows a pesticide, call the local poison control center or 911.

**[Note to teachers: make students aware of your local poison control center/emergency/hospital phone numbers.]**

If you ever get pesticides splashed on you, tell a grownup, take a shower as soon as you can, and put on clean clothes.

## **DISCUSSION QUESTIONS**

## DISCUSSION QUESTIONS

To be used to engage students in a discussion of the unit

Leading students in a discussion of the topics covered can be a valuable exercise. The following provides discussion questions and sample answers.

### Pests

Why would we want to keep a [rat, cockroach, mosquito, fly, flea] out of our house? *Because it can bite and spread disease.*

Why would we want to keep lice out of our hair? *Because they can bite and make your head itch.*

Why would we want to keep a termite out of the house? *Because it eats the wood that supports the house.*

Why should we not touch poison ivy? *Because it can cause a painful rash.*

Moths don't bite or spread disease. Why do we still consider them to be pests? *The larvae of moths eat wool.*

Why would we want to get rid of a weed? *Because it grows where we don't want it to.*

Why would we want to get rid of a slug? *Because it eats plants that we like.*

### Plants and Animals that Help Control Pests

What do owls do to help control pests? *They catch mice and rats.*

How does the ladybug help control pests? *It eats pests that eat plants and flowers.*

How do bats control pests? *Bats eat pests such as flies and mosquitoes.*

How does a dragonfly help control pests? *Each dragonfly can eat up to 1,000 mosquitoes a day.*

Spiders can be both helpful and hurtful. Do you know why? *Spiders are helpful when they use their web to catch pests such as flies. But some kinds of spiders have a painful bite.*

What does a frog do to help with pests? *A frog uses its tongue to catch insects.*

Some plants and trees repel insects naturally. What do some people use to repel moths? *Cedar*

## DISCUSSION QUESTIONS (continued)

### Prevention Measures

Why are food, water, and hiding places so important to pests? *Every pest needs food and water to live, and a hiding place to keep from being caught.*

Why is it important to close and seal cracks? *To keep pests from hiding there.*

What will bugs and other small pests do if there is a gap under the door? *They will crawl into the house.*

Is it a good idea to leave the window open or poke holes in window screens? *No. Closing the window or using screens and keeping them in good condition keeps flies and mosquitoes out of the house.*

Why should you pick up newspapers and clothes and not leave them lying around? *Because pests love to hide in them.*

Why should you keep trash cans closed and empty them often? *Because trash gives pests a place to hide, and sticky cans and bottles provide food.*

### **FOOD:**

What should you do with leftover food, drinks, dirty dishes? *When you have finished eating, put leftover food and drinks away, and wash dirty dishes, so they don't attract bugs.*

### **WATER:**

How can a pest get a drink at your house? *From open containers of water or leaky pipes.*

Where do mosquitoes like to lay their eggs? Where do pests find a drink? *In containers of standing water such as tires, buckets, and bottles.*

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## DISCUSSION QUESTIONS (continued)

### Tools that Help Control Pests

How does fly paper work? *Pests fly into it and get stuck.*

Where can you hide mousetraps? *Anywhere mice might hide: in closets, behind the refrigerator, or in cabinets, but away from people and pets.*

What is a fly swatter? *A good tool for getting rid of flying insects without using pesticides.*

Where and why would you use a hoe? *Outside the house, to dig up weeds.*

What is a tool that can help control roaches without spraying them with a pesticide? *Roach Trap or Bait Station*

How can we keep down weeds and eliminate a hiding place for snakes and other pests? *Mow the Lawn*

### What is a Pesticide and How Do I Handle it Safely?

What is a pesticide used for? *To kill pests.*

Who should stay away from pesticides? *All children, especially babies.*

Who should use pesticides? *Grownups only, never children.*

Why should grownups buy pesticides from a store rather than from someone on the street? *Store bought pesticides are safer because they come in the original container with directions for proper use.*

What kind of containers should pesticides be stored in? *Only in the container they came in. Never pour pesticides into another storage container such as a milk jug, a peanut butter jar, or a soda bottle.*

Where should pesticides be stored? *In a locked cabinet and never under the sink or in a low place where children and pets can reach them.*

## DISCUSSION QUESTIONS (continued)

### **How Can I Protect Myself and Those Around Me From Pesticide Poisoning?**

What does the [pirate sign, Mr. Yuk sticker] mean? ***It means poison. Don't touch or eat or drink or smell!***

What does the [warning sign, danger sign, danger-poison sign, danger-do not enter] mean? ***It means you should walk away from the area.***

What happens if pesticides are misused? ***People can become sick.***

Why should you wash fresh fruits and vegetables before eating them? ***To wash off what may remain of pesticides that farmers sometimes spray on their plants to keep pests away.***

What should you do if someone swallows a pesticide? ***Call the local poison control center.***

What should you do if you're splashed by pesticides? ***Take a shower as soon as you can and put on clean clothes. Tell a grownup.***



## **BINGO KEY**

<b>Pesticide Safety Bingo Key</b> <i>Claves del Bingo para promover la seguridad en el uso de plaguicidas</i>		
<b>Text/Texto</b>	<b>Caption/ Título</b>	<b>Number/ Número</b>
<b>THEME: PESTS</b> <b>TEMA: LAS PLAGAS</b>		
A long-tailed, four-legged pest that bites and spreads disease. <i>Un animalito de cuatro patas y de cola larga que muerde y transmite enfermedades.</i>	<b>Rat</b> <i>La rata</i>	1
These six-legged pests crawl and spread disease. <i>Estos insectos rastreros de seis patas transmiten enfermedades.</i>	<b>Cockroaches</b> <i>Las cucarachas</i>	2
A six-legged pest that eats wood. <i>Un insecto de seis patas que come madera.</i>	<b>Termite</b> <i>La termita</i>	3
A plant that makes you itch. <i>Una mata que pica y produce ronchas.</i>	<b>Poison Ivy</b> <i>Zumaque venenoso</i>	4
The larva of this winged insect eats wool. <i>La larva de este insecto volador come lana.</i>	<b>Moth</b> <i>La mariposa nocturna o polilla</i>	5
This pest looks like a snail without his house. <i>Este animalito se parece a un caracol sin concha.</i>	<b>Slug</b> <i>La babosa</i>	6
These pests live on cats and dogs. <i>Estos insectos viven de la sangre de los perros y gatos.</i>	<b>Fleas</b> <i>Las pulgas</i>	7
This flying insect bites and spreads disease. <i>Este insecto volador pica y transmite enfermedades.</i>	<b>Mosquito</b> <i>El zancudo</i>	8
These pests live in your hair and make your head itch. <i>Estos insectos viven en tu pelo y producen picazón.</i>	<b>Head Lice</b> <i>Los piojos</i>	9
It won't hurt you, but this unwelcome plant grows in your yard and garden where you don't want it. <i>No te hará daño, pero esta maleza crece en tu jardín sin que tú lo quieras.</i>	<b>Weed</b> <i>La mala hierba</i>	10

<b>Pesticide Safety Bingo Key</b> <i>Claves del Bingo para promover la seguridad en el uso de plaguicidas</i>		
<b>Text/Texto</b>	<b>Caption/ Título</b>	<b>Number/ Número</b>
<b>THEME: PLANTS AND ANIMALS THAT CONTROL PESTS</b> <b>TEMA: PLANTAS Y ANIMALES QUE AYUDAN A CONTROLAR LAS PLAGAS</b>		
A red and black insect that eats the bugs that eat plants. <i>Un insecto negro y rojo que se come a los insectos que comen las matas del jardín.</i>	<b>Ladybug</b> <b>El coquito</b>	11
A web-footed animal that lives in a pond and catches insects with its tongue. <i>Un animal brincón que vive en los charcos. Atrapa insectos con su lengua.</i>	<b>Frog</b> <b>La rana</b>	12
This flying animal has fur instead of feathers; it likes to eat insects. <i>Este animal volador tiene pelo en vez de plumas. Le gusta comer insectos.</i>	<b>Bat</b> <b>El murciélago</b>	13
A mouse hunter that says, “whooo.” <i>Un cazador de ratones que le gusta decir: “júuu”.</i>	<b>Owl</b> <b>La lechuza</b>	14
The wood from this tree is often used to repel moths. <i>Con frecuencia se usa la madera de este árbol para ahuyentar la polilla.</i>	<b>Cedar</b> <b>El cedro o ciprés</b>	15
This 8-legged creature spins a web to catch flying insects. <i>Esta criatura de ocho patas teje una red para atrapar insectos.</i>	<b>Spider</b> <b>La araña</b>	16
This flying insect with long wings and a skinny body can eat as many as 1,000 mosquitoes a day. <i>Este insecto volador tiene alas largas y un cuerpo muy delgado. Es capaz de comerse hasta 1,000 zancudos al día.</i>	<b>Dragonfly</b> <b>La libélula</b>	17
<b>THEME: PREVENTION MEASURES</b> <b>TEMA: MEDIDAS PARA PREVENIR LAS PLAGAS</b>		
These scraps of food will attract pests, if you leave them on the table after you eat. <i>Estos desperdicios de comida atraen a los insectos, si los dejas sobre la mesa después de comer.</i>	<b>Leftovers</b> <b>Las sobras o los restos</b>	18

<b>Pesticide Safety Bingo Key</b> <i>Claves del Bingo para promover la seguridad en el uso de plaguicidas</i>		
<b>Text/Texto</b>	<b>Caption/ Título</b>	<b>Number/ Número</b>
Too small for us to fit into, but pests like to hide in these little places. <i>Demasiado pequeños para que nosotros quepamos ahí, pero a los insectos les encanta esconderse en estos lugares.</i>	<b>Cracks &amp; Crevices</b> <b>Grietas y huecos</b>	19
A way to leave a pest homeless. <i>La manera de dejar sin casa a un insecto.</i>	<b>Close &amp; Seal</b> <b>Sellar la entrada</b>	20
Fixing this will keep pests from getting a drink. <i>Si se arregla ésto, los insectos no podrán tomar agua.</i>	<b>Leaky Pipe</b> <b>La gotera</b>	21
A way to keep insects from flying through the window. <i>Una forma de asegurar que los insectos voladores no entren por la ventana.</i>	<b>Window Screen</b> <b>Tela de alambre</b>	22
The three things that a pest needs to live. <i>Las tres cosas que necesita un insecto para vivir.</i>	<b>Food, Water &amp; Hiding Place</b> <b>Comida, agua y un escondite</b>	23
Creepy, crawly pests can walk right into the house because of this. <i>Esto permite que los animales pequeños y los insectos rastreros entren libremente a la casa.</i>	<b>Space Under the Door</b> <b>Una apertura debajo de la puerta</b>	24
While walking your dog, do this to keep away pests. <i>Cuando el perro hace sus necesidades, haz ésto para evitar atraer insectos.</i>	<b>Clean Up Pet Waste</b> <b>Limpia los desechos del perro.</b>	25
If you leave these lying around, pests will hide in them. <i>Si dejas éstos tirados, los insectos se esconderán en ellos.</i>	<b>Newspapers &amp; Dirty Laundry</b> <b>Periódicos y ropa sucia</b>	26

<b>Pesticide Safety Bingo Key</b> <i>Claves del Bingo para promover la seguridad en el uso de plaguicidas</i>		
<b>Text/Texto</b>	<b>Caption/ Título</b>	<b>Number/ Número</b>
Outside in the yard, this is where pests can get a drink and where mosquitos like to lay their eggs. <i>Afuera en el jardín, hay un lugar donde las plagas pueden tomar agua y donde a los zancudos les gusta poner sus huevos.</i>	<b>Standing Water</b> <i>Agua estancada</i>	27
If you don't want pests, always wash these after you eat. <i>Si no quieres insectos u otras plagas, siempre lava estas cosas después de comer.</i>	<b>Dirty Dishes &amp; Countertops</b> <i>Los platos sucios y las mesas</i>	28
You put your garbage here, but if you don't want to attract pests, be sure to cover them with a lid and to empty them often. <i>Se pone la basura aquí, pero para evitar la plaga, manténlos tapados y vacíalos a menudo.</i>	<b>Trash Cans</b> <i>Los basureros</i>	29
<b>THEME: TOOLS THAT HELP CONTROL PESTS</b> <b>TEMA: HERRAMIENTAS QUE AYUDAN A CONTROLAR LAS PLAGAS</b>		
If you put this behind stoves and refrigerators, it will help control roaches. <i>Al poner ésto debajo de la estufa o del refrigerador, ayuda a eliminar las cucarachas.</i>	<b>Roach Trap or Bait Station</b> <i>La trampa para las cucarachas</i>	30
This machine cuts grass and weeds. It also eliminates a hiding place for snakes and other pests. <i>Este aparato corta la maleza. Al mismo tiempo, elimina un escondite para las culebras y otras plagas.</i>	<b>Lawn Mower</b> <i>Máquina para cortar césped</i>	31
A sticky way to catch flies. <i>Algo pegajoso para atrapar moscas.</i>	<b>Fly Paper</b> <i>Papel atrapamoscas</i>	32
This gadget snaps shut when the mouse takes the bait. <i>Este artefacto se dispara cuando el ratón toma el cebo.</i>	<b>Mouse Trap</b> <i>La trampa para ratones</i>	33

<b>Pesticide Safety Bingo Key</b> <i>Claves del Bingo para promover la seguridad en el uso de plaguicidas</i>		
<b>Text/Texto</b>	<b>Caption/ Título</b>	<b>Number/ Número</b>
A gardening tool to dig weeds. <i>Una herramienta del jardín para sacar la maleza.</i>	<b>Hoe</b> <i>El azadón</i>	34
A long-handled tool to swat flying insects. <i>Una herramienta de mango largo para aplastar insectos voladores.</i>	<b>Fly Swatter</b> <i>El mata moscas</i>	35
<b>THEME: WHAT IS A PESTICIDE AND HOW DO I HANDLE IT SAFELY?</b> <b>TEMA: ¿QUE ES UN PLAGUICIDA Y COMO SE USA DE UNA MANERA SEGURA?</b>		
A poison that kills pests. <i>Un veneno que mata la plaga.</i>	<b>Pesticide</b> <i>El plaguicida</i>	36
A safe place to buy a pesticide. <i>Un lugar seguro donde comprar un plaguicida.</i>	<b>Store</b> <i>El almacén o la tienda</i>	37
A place where you should never buy a pesticide. <i>Un lugar donde nunca debiera comprarse un plaguicida.</i>	<b>Street</b> <i>La calle</i>	38
Something that must always be read carefully and followed by the grownup who uses a pesticide. <i>Antes de aplicar un plaguicida, siempre se debe leer ésto y seguir sus instrucciones.</i>	<b>Label</b> <i>La etiqueta</i>	39
Containers where pesticides should never be put. <i>Envases donde nunca deben guardarse los plaguicidas.</i>	<b>Food &amp; Drink Containers</b> <i>Envases de bebida y de comida</i>	40
There should be one of these on any place where pesticides are stored, to prevent accidental poisoning. <i>Cualquier lugar donde se guardan plaguicidas debe cerrarse con ésto para prevenir un envenenamiento por error.</i>	<b>Lock</b> <i>El candado</i>	41

<b>Pesticide Safety Bingo Key</b> <i>Claves del Bingo para promover la seguridad en el uso de plaguicidas</i>		
<b>Text/Texto</b>	<b>Caption/ Título</b>	<b>Number/ Número</b>
Someone too young to know that pesticides and traps are dangerous. <i>Alguien tan joven que no sabe que los plaguicidas y las trampas son peligrosos.</i>	<b>Baby</b> <i>Un bebé</i>	42
Someone old enough to know better than to play with pesticides, but too young to use them safely. <i>Alguien suficientemente grande para saber que los plaguicidas no son juguetes, pero demasiado pequeño para usarlos sin peligro.</i>	<b>Child</b> <i>Un niño o una niña</i>	43
Someone who can use a pesticide. <i>Alguien que sí puede utilizar un plaguicida.</i>	<b>Grownup</b> <i>Un adulto</i>	44
Pesticides should never be stored here, within reach of children and pets. <i>Nunca deberían guardarse los plaguicidas en este lugar al alcance de los niños.</i>	<b>Under the Sink or a Low Cabinet</b> <i>Gabinete cerca del piso</i>	45
<b>THEME: HOW CAN I PROTECT MYSELF AND THOSE AROUND ME FROM PESTICIDE POSIONING?</b> <b>TEMA: COMO PROTEGERSE DEL ENVENENAMIENTO POR PLAGUICIDA</b>		
Fresh foods that should always be washed before eating. <i>Comida fresca que siempre debe lavarse antes de comerla.</i>	<b>Fruits &amp; Vegetables</b> <i>Las frutas y verduras</i>	46
Something bad that can happen when a pesticide is misused. <i>Algo malo que puede ocurrir cuando no se usa un plaguicida de una manera apropiada.</i>	<b>Become Sick</b> <i>Enfermarse</i>	47
Where to call if a pesticide is swallowed. <i>Dónde llamar si se traga o se ingiere un plaguicida.</i>	<b>Poison Control Center or 911</b> <i>El centro de control de envenenamiento o al 911</i>	48

<b>Pesticide Safety Bingo Key</b> <i>Claves del Bingo para promover la seguridad en el uso de plaguicidas</i>		
<b>Text/Texto</b>	<b>Caption/ Título</b>	<b>Number/ Número</b>
These animal friends at home can be hurt by pesticides. <i>Los plaguicidas también pueden hacer daño a estos animalitos que son tus amigos.</i>	<b>Pets</b> <i>Las mascotas</i>	49
A pirate sign that also means poison. <i>Un signo de pirata que también significa veneno.</i>	<b>Skull &amp; Crossbones</b> <i>La calavera</i>	50
If you ever get pesticides splashed on you, do this as soon as you can. <i>Si alguna vez te salpica un plaguicida, debes hacer ésto lo más pronto posible.</i>	<b>Shower &amp; Change Clothes</b> <i>Ducharte y cambiarte de ropa</i>	51
A sticker that you can put on pesticides to warn children that they should never eat or drink what's inside; it tastes awful. <i>Una calcomanía que se puede poner en los frascos de plaguicida para avisar a los niños que nunca se debe comer o tomar lo que está adentro; sabe horrible.</i>	<b>Mr. Yuk</b> <i>Mr. Yuk</i>	52
A sign that means you should not enter. <i>Una señal que significa que no debes entrar o avanzar.</i>	<b>Warning Sign</b> <i>Una señal de advertencia</i>	53
A kind of pesticide that should never be used inside the house. <i>Un tipo de plaguicida que nunca debiera utilizarse dentro de la casa.</i>	<b>Farm Pesticides</b> <i>Aquel que se usa para la agricultura</i>	54



# **BINGO CALL OUT SHEET**

**Instructions for using the Bingo Call Out Sheet:**

Once students have been given their bingo boards and bingo board markers and are ready to play, start the game by selecting an entry from the column entitled “Category.” Read the text description and make a check in the corresponding “G1” (*i.e.*, Game 1) column. For example, if you pick the first entry, “A long-tailed, four-legged pest that bites and spreads disease,” make a check mark in the “G1” column. Continue selecting entries from the “Category” column in a random order and marking the corresponding “G1” boxes until a student declares “Bingo.” Try to pick entries from each thematic unit (*i.e.*, Pests, Plants and Animals that Control Pests, etc.) By referring to the check marked boxes, you’ll be able to verify the winning bingo board. Use a new column for each subsequent game.

Bingo Call Out Sheet					
Category/Categoría		G1	G2	G3	G4
<b>Card No.</b>	<b>PESTS/LAS PLAGAS</b>				
1	A long-tailed, four-legged pest that bites and spreads disease. <b>Rat</b> <i>Un animalito de cuatro patas y de cola larga que muerde y transmite enfermedades. La rata</i>				
2	These six-legged pests crawl and spread disease. <b>Cockroaches</b> <i>Estos insectos rastreros de seis patas transmiten enfermedades. Las cucarachas</i>				
3	A six-legged pest that eats wood. <b>Termite</b> <i>Un insecto de seis patas que come madera. La termita</i>				
4	A plant that makes you itch. <b>Poison Ivy</b> <i>Una mata que pica y produce ronchas. Zumaque venenoso</i>				
5	The larva of this winged insect eats wool. <b>Moth</b> <i>La larva de este insecto volador come lana. La mariposa nocturna o polilla</i>				
6	This pest looks like a snail without his house. <b>Slug</b> <i>Este animalito se parece a un caracol sin concha. La babosa</i>				
7	These pests live on cats and dogs. <b>Fleas</b> <i>Estos insectos viven de la sangre de los perros y gatos. Las pulgas</i>				
8	This flying insect bites and spreads disease. <b>Mosquito</b> <i>Este insecto volador pica y transmite enfermedades. El zancudo</i>				

Bingo Call Out Sheet					
Category/Categoría		G1	G2	G3	G4
9	These pests live in your hair and make your head itch. <b>Head Lice</b> <i>Estos insectos viven en tu pelo y producen picazón. Los piojos</i>				
10	It won't hurt you, but this unwelcome plant grows in your yard and garden where you don't want it. <b>Weed</b> <i>No te hará daño, pero esta maleza crece en tu jardín sin que tú lo quieras. La mala hierba</i>				
<b>PLANTS AND ANIMALS THAT CONTROL PESTS</b> <b>PLANTAS Y ANIMALES QUE AYUDAN A CONTROLAR LAS PLAGAS</b>					
11	A red and black insect that eats the bugs that eat plants. <b>Ladybug</b> <i>Un insecto negro y rojo que se come a los insectos que comen las matas del jardín. El coquito</i>				
12	A web-footed animal that lives in a pond and catches insects with its tongue. <b>Frog</b> <i>Un animal brincón que vive en los charcos. Atrapa insectos con su lengua. La rana</i>				
13	This flying animal has fur instead of feathers; it likes to eat insects. <b>Bat</b> <i>Este animal volador tiene pelo en vez de plumas. Le gusta comer insectos. El murciélago</i>				
14	A mouse hunter that says, "whooo." <b>Owl</b> <i>Un cazador de ratones que le gusta decir: "júuu". La lechuza</i>				
15	The wood from this tree is often used to repel moths. <b>Cedar</b> <i>Con frecuencia se usa la madera de este árbol para ahuyentar la polilla. El cedro o ciprés</i>				
16	This 8-legged creature spins a web to catch flying insects. <b>Spider</b> <i>Esta criatura de ocho patas teje una red para atrapar insectos. La araña</i>				
17	This flying insect with long wings and a skinny body can eat as many as 1,000 mosquitoes a day. <b>Dragonfly</b> <i>Este insecto volador tiene alas largas y un cuerpo muy delgado. Es capaz de comerse hasta 1,000 zancudos al día. La libélula</i>				

Bingo Call Out Sheet					
Category/Categoría		G1	G2	G3	G4
	<b>PREVENTION MEASURES/MEDIDAS PARA PREVENIR LAS PLAGAS</b>				
18	These scraps of food will attract pests, if you leave them on the table after you eat. <b>Leftovers</b> <i>Estos desperdicios de comida atraen a los insectos, si los dejas sobre la mesa después de comer. <b>Las sobras o los restos</b></i>				
19	Too small for us to fit into, but pests like to hide in these little places. <b>Cracks &amp; Crevices</b> <i>Demasiado pequeños para que nosotros quepamos ahí, pero a los insectos les encanta esconderse en estos lugares. <b>Grietas y huecos</b></i>				
20	A way to leave a pest homeless. <b>Close &amp; Seal</b> <i>La manera de dejar sin casa a un insecto. <b>Sellar la entrada</b></i>				
21	Fixing this will keep pests from getting a drink. <b>Leaky Pipe</b> <i>Si se arregla ésto, los insectos no podrán tomar agua. <b>La gotera</b></i>				
22	A way to keep insects from flying through the window. <b>Window Screen</b> <i>Una forma de asegurar que los insectos voladores no entren por la ventana. <b>Tela de alambre</b></i>				
23	The three things that a pest needs to live. <b>Food, Water &amp; Hiding Place</b> <i>Las tres cosas que un insecto necesita para vivir. <b>Comida, agua y un escondite</b></i>				
24	Creepy, crawly pests can walk right into the house because of this. <b>Space Under the Door</b> <i>Esto permite que los animales pequeños y los insectos rastreros entren libremente a la casa. <b>Una apertura debajo de la puerta</b></i>				
25	While walking your dog, do this to keep away pests. <b>Clean Up Pet Waste</b> <i>Cuando el perro hace sus necesidades, haz ésto para evitar atraer insectos. <b>Limpia los desechos del perro.</b></i>				

Bingo Call Out Sheet					
Category/Categoría		G1	G2	G3	G4
26	If you leave these lying around, pests will hide in them. <b>Newspapers &amp; Dirty Laundry</b> <i>Si dejas éstos tirados, los insectos se esconderán en ellos.</i> <b>Periódicos y ropa sucia</b>				
27	Outside in the yard, this is where pests can get a drink and where mosquitos like to lay their eggs. <b>Standing Water</b> <i>Afuera en el jardín, hay un lugar donde las plagas pueden tomar agua y donde a los zancudos les gusta poner sus huevos.</i> <b>Agua estancada</b>				
28	If you don't want pests, always wash these after you eat. <b>Dirty Dishes &amp; Countertops</b> <i>Si no quieres insectos u otras plagas, siempre lava estas cosas después de comer.</i> <b>Los platos sucios y las mesas</b>				
29	You put your garbage here, but if you don't want to attract pests, be sure to cover them with a lid and to empty them often. <b>Trash Cans</b> <i>Se pone la basura aquí, pero para evitar la plaga, manténlos tapados y vacíalos a menudo. Los basureros</i>				
<b>TOOLS THAT HELP CONTROL PESTS</b> <b>HERRAMIENTAS QUE AYUDAN A CONTROLAR LAS PLAGAS</b>					
30	If you put this behind stoves and refrigerators, it will help control roaches. <b>Roach Trap or Bait Station</b> <i>Al poner ésto debajo de la estufa o del refrigerador, ayuda a eliminar las cucarachas. La trampa para las cucarachas</i>				
31	This machine cuts grass and weeds. It also eliminates a hiding place for snakes and other pests. <b>Lawn Mower</b> <i>Este aparato corta la maleza. Al mismo tiempo, elimina un escondite para las culebras y otras plagas. Máquina para cortar césped</i>				
32	A sticky way to catch flies. <b>Fly Paper</b> <i>Algo pegajoso para atrapar moscas. Papel atrapamoscas</i>				

<b>Bingo Call Out Sheet</b>					
<b>Category/Categoría</b>		<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4</b>
33	This gadget snaps shut when the mouse takes the bait. <b>Mouse Trap</b> <i>Este artefacto se dispara cuando el ratón toma el cebo. <b>La trampa para ratones</b></i>				
34	A gardening tool to dig weeds. <b>Hoe</b> <i>Una herramienta del jardín para sacar la maleza. <b>El azadón</b></i>				
35	A long-handled tool to swat flying insects. <b>Fly Swatter</b> <i>Una herramienta de mango largo para aplastar insectos voladores. <b>El mata moscas</b></i>				
<b>WHAT IS A PESTICIDE AND HOW DO I HANDLE IT SAFELY?</b> <b>¿QUE ES UN PLAGUICIDA Y COMO SE USA DE UNA MANERA SEGURA?</b>					
36	A poison that kills pests. <b>Pesticide</b> <i>Un veneno que mata la plaga. <b>El plaguicida</b></i>				
37	A safe place to buy a pesticide. <b>Store</b> <i>Un lugar seguro donde comprar un plaguicida. <b>El almacén o la tienda</b></i>				
38	A place where you should never buy a pesticide. <b>Street</b> <i>Un lugar donde nunca debiera comprarse un plaguicida. <b>La calle</b></i>				
39	Something that must always be read carefully and followed by the grownup who uses a pesticide. <b>Label</b> <i>Antes de aplicar un plaguicida, siempre se debe leer ésto y seguir sus instrucciones. <b>La etiqueta</b></i>				
40	Containers where pesticides should never be put. <b>Food &amp; Drink Containers</b> <i>Envases donde nunca deben guardarse los plaguicidas. <b>Envases de bebida y de comida</b></i>				
41	There should be one of these on any place where pesticides are stored, to prevent accidental poisoning. <b>Lock</b> <i>Cualquier lugar donde se guardan plaguicidas debe cerrarse con ésto para prevenir un envenenamiento por error. <b>El candado</b></i>				

Bingo Call Out Sheet					
Category/Categoría		G1	G2	G3	G4
42	Someone too young to know that pesticides and traps are dangerous. <b>Baby</b> <i>Alguien tan joven que no sabe que los plaguicidas y las trampas son peligrosos. Un bebé</i>				
43	Someone old enough to know better than to play with pesticides, but too young to use them safely. <b>Child</b> <i>Alguien suficientemente grande para saber que los plaguicidas no son juguetes, pero demasiado pequeño para usarlos sin peligro. Un niño o una niña</i>				
44	Someone who can use a pesticide. <b>Grownup</b> <i>Alguien que sí puede usar un plaguicida. Un adulto</i>				
45	Pesticides should never be stored here, within reach of children and pets. <b>Under the Sink or a Low Cabinet</b> <i>Nunca deberían guardarse los plaguicidas en este lugar al alcance de los niños. Gabinete cerca del piso</i>				
<b>HOW CAN I PROTECT MYSELF AND THOSE AROUND ME FROM PESTICIDE POSIONING?</b> <b>¿COMO PROTEGERSE DEL ENVENENAMIENTO POR PLAGUICIDA?</b>					
46	Fresh foods that should always be washed before eating. <b>Fruits &amp; Vegetables</b> <i>Comida fresca que siempre debe lavarse antes de comerla. Las frutas y verduras</i>				
47	Something bad that can happen when a pesticide is misused. <b>Become Sick</b> <i>Algo malo que puede ocurrir cuando no se usa un plaguicida de una manera apropiada. Enfermarse</i>				
48	Where to call if a pesticide is swallowed. <b>Poison Control Center or 911</b> <i>Dónde llamar si traga o ingiere un plaguicida. El centro de control de envenenamiento o al 911</i>				
49	These animal friends at home can be hurt by pesticides. <b>Pets</b> <i>Los plaguicidas también pueden hacer daño a estos animalitos que son tus amigos. Las mascotas</i>				

Bingo Call Out Sheet					
Category/Categoría		G1	G2	G3	G4
50	A pirate sign that also means poison. <b>Skull &amp; Crossbones</b> <i>Un signo de pirata que también significa veneno. <b>La calavera</b></i>				
51	If you ever get pesticides splashed on you, do this as soon as you can. <b>Shower &amp; Change Clothes</b> <i>Si alguna vez te salpica un plaguicida, debes hacer ésto lo más pronto posible. <b>Ducharte y cambiarte de ropa</b></i>				
52	A sticker that you can put on pesticides to warn children that they should never eat or drink what's inside; it tastes awful. <b>Mr. Yuk</b> <i>Una calcomanía que se puede poner en los frascos de plaguicida para avisar a los niños que nunca se debe comer o tomar lo que está adentro; sabe horrible. <b>Mr. Yuk</b></i>				
53	A sign that means you should not enter. <b>Warning Sign</b> <i>Una señal que significa que no debes entrar o avanzar. <b>Una señal de advertencia</b></i>				
54	A kind of pesticide that should never be used inside the house. <b>Farm Pesticides</b> <i>Un tipo de plaguicida que nunca debiera utilizarse dentro de la casa. <b>Aquel que se usa para la agricultura</b></i>				



**PESTICIDE SAFETY BINGO**  
**BEGINNER LEVEL GAME**

**Pesticide Safety Bingo**  
**Beginner Level Game Materials for Grades K-6**

There are 36 bingo boards in each game set. Each bingo board contains 16 illustrations of various pests, plants or animals that prevent pests, pest prevention techniques, pest control tools, and safe pesticide handling practices.

Also included is a Bingo Call Out Sheet that the teacher or bingo caller will use to keep track of the bingo categories called out in each game.

Teachers will need to provide Bingo Board Markers. For K-3 students, these should include “non-chokeable” items such as inch cubes or connector blocks. For older students, items such as coins, dried beans, and bottle caps may be used. Using markers rather than pens or pencils ensures that the bingo boards can be reused multiple times. To determine the maximum number of necessary markers, multiply 16 (the number of squares on the bingo board) by the number of students playing.

**Pesticide Safety Bingo**  
**Beginner Level Game for Grades K-6**  
**Lesson Plan**

**Total instruction time:** 1 hour

**Unit:** Pesticide Safety

**Goals:** To make students aware of pesticide safety concerns by helping them identify pests and beneficial animals, methods of prevention and pest control, and the dangers of pesticides.

**Assumptions:** Students will be familiar with the concept of bingo. Based on the introduction, students will be able to identify the graphic representation of what the teacher is reading.

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**Segment:** Introduction

**Duration:** 20 minutes

1. Using the Unit Introduction and the 8x10 graphics, introduce the topic and present the pictures related to the dialogue to familiarize students with the graphics they will encounter during the game.
2. Distribute 1 bingo board per student or divide the classroom into teams of 4 and distribute 1 bingo board per team. Dispense a sufficient number of bingo board markers.
3. Establish what will constitute a winning card (*i.e.*, completing a row either horizontally, vertically, or diagonally; completing of the entire card; or any combination). Explain the method of play.
4. Using an aide or advanced student, demonstrate the game. Call out a description from the Call Out Sheet. Have the aide/student model the appropriate response by placing a marker on the proper square of the bingo board. Continue until student comprehension of the game is confirmed.

**Pesticide Safety Bingo**  
**Beginner Level Game for Grades K-6**  
**Lesson Plan (continued)**

**Segment:**     **Instructions for Bingo**  
**Duration:**    **40 minutes**

1.     Select an entry from the Call Out Sheet. Use the columns labeled “G1, G2, etc.” to keep track of call outs made per game. Vary the call outs from each thematic/concept group.
  
2.     Read the text (*e.g.*, A long-tailed, four-legged pest that bites and spreads disease).<sup>1</sup> Instruct students to find the picture that goes with the description and mark it on the appropriate square of their bingo boards. Continue calling out descriptions until a student declares “bingo.”
  
3.     Once “bingo” is declared, tell the students to keep their bingo markers in place. (The teacher should go to the winner’s desk to verify the card.) Have the student call out the winning squares.<sup>2,3,4</sup>
  
4.     Start the process over with a new game<sup>5</sup>

**Variations:**

<sup>1</sup> If there is any concern that students will not be able to identify the associated picture, provide the answer (*e.g.*, A long-tailed, four-legged pest that bites and spreads disease. A rat.)

<sup>2</sup> After the winner reads off the winning bingo squares, use the Discussion Questions to reinforce the lesson (*e.g.*, “The first square was a rat, Why should we keep rats away?”)

<sup>3</sup> Continue the game until a set number of winning cards are played. Be sure to tell students to keep their bingo markers in place after a winner declares “bingo.”

<sup>4</sup> Present the winners with a prize (*e.g.*, stickers, “winner’s” ribbon, etc.).

<sup>5</sup> Allow one of the students to be the caller.

**Objectives:**

To win, the student or team must complete an entire row either vertically, horizontally, or diagonally, or, if longer play is desired, they must complete an entire bingo board. When the student or team has completed a row or entire bingo board, they should declare “bingo.” The student or team must keep the markers on the bingo board and then read back the winning squares to the bingo caller. The bingo caller will verify that a description was read for each marked illustration. Once verified, the student or team that declares “bingo” is the winner.

# **PESTICIDE SAFETY SCRAMBLE GAME**

**Pesticide Safety Scramble Game**  
**Advanced Level Game for Grades 4 - 6**  
**Materials**

There are 108 playing cards in each game set consisting of 54 text cards and 54 picture cards devoted to the following thematic subsets:

- pests (10 cards)
- plants and animals that control pests (7 cards)
- prevention measures (12 cards)
- tools that help control pests (6 cards)
- how to handle pesticides safely (10 cards)
- how to protect yourself and those around you from pesticides (9 cards)

Prior to lesson, shuffle each subset of cards, thoroughly mixing text and picture cards in a random order. If the teacher desires a more even distribution, the thematic subsets of “plants and animals that control pests” and “tools that help control pests” may be combined into one theme entitled “alternatives to pesticides for pest control.” In this version, there would be five thematic subsets:

- pests (10 cards)
- pesticide alternatives (13 cards)
- prevention measures (12 cards)
- how to handle pesticides safely (10 cards)
- how to protect yourself and those around you from pesticides (9 cards)

Teachers will need to provide:

- poster board and magic markers that students will use to create posters, and
- paper and pens/pencils that students will use to write stories or reports about what they have learned about pesticide safety.
- Banner or flip chart paper (on which pesticide theme categories may be printed).

**Pesticide Safety - Scramble**  
**Advanced Level Game for Grades 4 - 6**  
**Lesson Plan**

<b>Total instruction time:</b>	1 hour
<b>Unit:</b>	Pesticide Safety
<b>Goals:</b>	To make students aware of pesticide safety by helping them identify pests and beneficial animals, methods of prevention and pest control, and the dangers of pesticides.
<b>Assumptions:</b>	Based on the unit introduction, students will be able to match up descriptive text cards with the associated picture cards.
<b>Teacher Prep:</b>	Before class, divide the cards (both text and picture) into thematic subsets ( <i>i.e.</i> , one subset for identifying pests, another for pest management tools, etc.). Combine the text and picture cards of each team's subset of thematic cards. Shuffle them thoroughly in random order.

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**Segment: Introduction**  
**Duration: 20 minutes**

1. Using the Unit Introduction and the 8x10 graphics, introduce the topic and present the pictures related to the dialogue to familiarize students with the graphics they will encounter during the game.
2. Divide the class into six (6) teams if each original subset is to be used, or five (5) teams if “plants and animals” and “tools to control pests” have been combined. Have each team work at a table or have them push their desks together into a large square.
3. Explain to students that their goal is to work together to match up text and picture cards that will be given to them. The first group to finish should raise their hand. **[Variation: Omit the competition element and let each group work to completion without any team declaring victory.]**
4. Place the subsets of shuffled text and picture cards on each team's table.
5. Confirm that students understand the concept of the game.

**Pesticide Safety - Scramble**  
**Advanced Level Game for Grades 4 - 6**  
**Lesson Plan (continued)**

**Segment: Instructions for Scramble**

**Duration: 40 minutes (or longer depending on variations used)**

1. Ask one member from each team to deal the cards face up on the table and begin the game.
2. As teams complete the task, check for accuracy, provide assistance as necessary. Ask each team quietly to pick out the theme or common thread of the group of cards that they matched.
3. When each team has finished and the results are confirmed, ask one member of the team to pick up the cards, shuffle them, and leave them stacked on the table.
4. Have each team rotate clockwise to the next table.
5. Repeat the game until the teams are back at their original desks or table.

**Variations:**

1. When each team has finished, ask students to:  
read their cards and present the pictures to the class **and/or**  
write a story about what they've learned (to share with the class and take home to their parents) **and/or**  
create a poster to share what they've learned (display in classroom, around school, or take home) **and/or**  
Develop a play based on what they learned.
2. Prior to the game, print the following themes on 5 large pieces of paper (each theme should be on a separate piece of paper) and hang them around the room. As soon as each team finishes matching its cards, have the members gather under the theme represented by their cards. When all teams have finished, let each team explain its theme to the others.

**Themes:**

Pests	Tools that Help Control Pests
Plants & Animals that Control Pests	Safe Pesticide Handling
Prevention Measures	How to Prevent Pesticide Poisoning

*For more even distribution, the thematic subsets of “plants and animals that control pests” and “tools that help control pests” may be combined into one theme entitled “alternatives to pesticides for pest control.”*



**Pesticide Safety - Scramble**  
**Advanced Level Game for Grades 4 - 6**  
**Lesson Plan (Continued)**

**Objectives:**

Students will work in teams to unite each thematic text card with its matching illustration in a manner similar to the game *Concentration*. In this version, however, cards are presented face up. For example, the team that has the “pest” thematic subset will encounter, among several other cards, a text card that reads, “A long-tailed, four-legged pest that bites and spreads disease.” Their task will be to work together to match it to the card with the illustration of a rat. Once a team has accurately matched all their cards, they should raise their hands unless the non-competitive variation is adopted. Once verified, the team is declared the winner. Each team then rotates clockwise to the next table and begins the process over again on a new thematic subset. For example, Team 1 began with the “pest” thematic subset. During the second game, they will work on the “pest management tools” subset. Teams will continue rotating until they return back to their original thematic subset (*e.g.*, the game will end when Team 1 returns to the table holding the “pest” thematic subset.) The teacher may end the game after the first round and instruct students to either read their cards and present the pictures to the class, write a story/report about what they have learned, and/or create a poster to share what they have learned.

# **MATCH GAME**

**Pesticide Safety Match Game**  
**Advanced Level Game for Grades 4 - 6**  
**Materials**

There are 108 playing cards in each game set consisting of 54 text cards and 54 picture cards devoted to the following thematic subsets:

- pests (10 cards)
- plants and animals that control pests (7 cards)
- prevention measures (12 cards)
- tools that help control pests (6 cards)
- how to handle pesticides safely (10 cards)
- how to protect yourself and those around you from pesticides (9 cards)

Teachers will need to provide:

1. kitchen timer (to delineate the amount of time devoted to the game)
2. poster board and magic markers that students will use to create posters, and
3. paper and pens/pencils that students will use to write stories or reports about what they have learned about pesticide safety.

**Pesticide Safety Match Game**  
**Advanced Level Game For Grades 4 - 6**  
**Lesson Plan**

- Unit:** Pesticide Safety
- Goals:** To make students aware of pesticide safety by helping them identify pests and beneficial animals, methods of prevention and pest control, and the dangers of pesticides.
- Assumptions:** Based on the introduction, students will be able to match up descriptive text cards with their associated picture cards.
- 

**Segment:** Introduction  
**Duration:** 10 minutes

Using the Unit Introduction and the 8x10 graphics, introduce the topic and present the pictures related to the dialogue to familiarize students with the graphics they will encounter during the game.

Explain to the students that their goal is to help the holder of the text cards find the matching picture cards before time runs out.

Demonstrate the game. Have an aide or advanced student read one of his/her text cards to the seated students (*i.e.*, "I'm looking for a long-tailed, four-legged pest that bites and spreads disease"). The teacher, modeling the response of the students holding the picture cards, should say, "I've got a rat." The aide will take the picture card and match it with the text card. The aide will repeat the process until he/she has found all the matches to his/her text cards. The aide will then move to the front of the room to signify that he/she is done.

Confirm that students understand the concept.

**Pesticide Safety Match Game**  
**Advanced Level Game for Grades 4 - 6**  
**Lesson Plan (continued)**

**Segment:     Instructions for Match Game**

**Duration:    30 minutes**

Divide the classroom into 2 groups. Distribute the text cards to half of the class and the picture cards to the other half. The size of the class will determine how many cards each student receives.

Ask the students holding text cards to stand in the front of the room while those with the picture cards remain seated.

Set the timer at 15 minutes (or whatever duration is deemed appropriate), start the timer and begin the game.

As students holding the text cards walk around to search for the matching picture cards from the seated students, limit teacher involvement. Allow students to negotiate meaning and intervene only when necessary.

As students holding text cards move to the front of the room with their matching picture cards, check for accuracy.

The teacher should send incorrect matches back into the game.

Once all the matches have been made and the students are standing in the front of the room, have the students read off their matching cards before returning to their seats. Ask them to discuss their cards using the attached Discussion Questions (*i.e.*, “You’ve got a rat. Why should we try to keep rats out of our home?”)

**[Variation: Switch roles and let those students who held the text cards hold the picture cards in the next round.]**

**Objectives:**

To accomplish their task, students holding the text cards must find the holders of the companion picture cards. For example, the student holding the text card that says, “A long-tailed, four-legged pest that bites and spreads disease,” must find the classmate that is holding an illustration of a rat. Once completed, students will reinforce what they’ve learned by discussing their cards with the class.

## **PESTICIDE TALES**

**Pesticide Safety - Pesticide Tales**  
**Advanced Level Game for Grades 4 - 6**  
**Materials**

There are 54 picture cards in each game set. The matching text cards will not be used in this game. Prior to the lesson, shuffle the picture cards in random order.

Teachers will need to provide:

paper and pens/pencils that students will use to write stories, and  
poster board or construction paper and magic markers that students may use to create  
visual aids.

**Pesticide Safety - Pesticide Tales**  
**Advanced Level Game For Grades 4 - 6**  
**Lesson Plan**

**Total Instruction Time:** 2 hours, 10 minutes

**Unit:** Pesticide Safety

**Goals:** To make students aware of pesticide safety by helping them identify pests and beneficial animals, methods of prevention and pest control, and the dangers of pesticides.

**Assumptions:** Based on the introduction, students will be able to formulate a cohesive narrative devoted to pesticide safety.

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**Segment:** Introduction

**Duration:** 10 minutes

Using the Unit Introduction and the 8x10 graphics, introduce the topic and present the pictures related to the dialogue to familiarize students with the graphics they will encounter during the game. *(If this game is being played following Scramble or Match Game, it is not necessary to give the Unit Introduction again.)*

Explain to the students that they will be divided into teams and that each team will be given a certain number of picture cards.<sup>1</sup> Their goal is to work together to create a story using as many of the cards as possible. They will then present this story (either by reading it or acting it out) to the rest of the class.<sup>2</sup>

Confirm that students understand the concept.

<sup>1</sup>Class size will dictate the number of teams, the number of students in each team, and the number of cards distributed to each team. It is preferable to keep the teams to 5-7 members each. In a class of 30 students, for example, there would be 6 teams of 5 members each. In this case, each team would receive 9 cards.

<sup>2</sup>To facilitate subsequent iterations of the game, teachers should keep copies of the best stories from previous games. These can be read to students that are new to the game to give them a better idea of the objective.



**Pesticide Safety - Pesticide Tales**  
**Advanced Level Game for Grades 4 - 6**  
**Lesson Plan (continued)**

**Segment:     Instructions for Pesticide Tales**

**Duration:    1 hour**

1.     Divide the classroom into teams (see footnote on previous page). Have the students congregate into teams either by moving their desks together or by finding suitable work areas.
2.     Distribute the picture cards to the teams (see footnote on previous page).
3.     Instruct students to review their cards and brainstorm ideas for a story that incorporates as many of the cards as possible. Direct them to write down their story and prepare to present it to the class.<sup>1</sup>
4.     Circulate among the teams to assess their progress and provide help as needed.

**Variation:**

<sup>1</sup>Allow students to produce visual aids to accompany their story by providing them with construction paper, flip chart paper, pens, crayons, etc.

**Segment:     Presentation of Pesticide Tales**

**Duration:    1 hour**

1.     Have each group present its story.

**Variation:**

Expand the scope and duration of the exercise. Give students more class time to develop their presentations and stretch the presentations over the course of a week, rather than all on one day.

**Objectives:**

To accomplish their task, students must work together to link the cards into a story that reflects what they have learned about pesticide safety.