VECTOR

FIGHTS THE BITE

VAQUERO

DONA ANA COUNTY
NEW MEXICO

Border
Office of Border Health
HEALTH

¡Hola! I am Keeko, the mosquito bandido, my friends call me "el picador."

¡Hola! Mi nombre es Keeko, el moyote bandido, mis amigos me llaman "el picador."

Artwork by Tony Pennock

The most important thing I need to have is water to hatch. Rain fills in all sorts of outside toys and containers.

Lo más importante que necesito tener es agua para salir del cascarón. La lluvia llena todo tipo de juguetes y recipientes en los patios.

Check your backyard for water. If you find water in tires or wading pools, ask your parents to check it for mosquitoes.
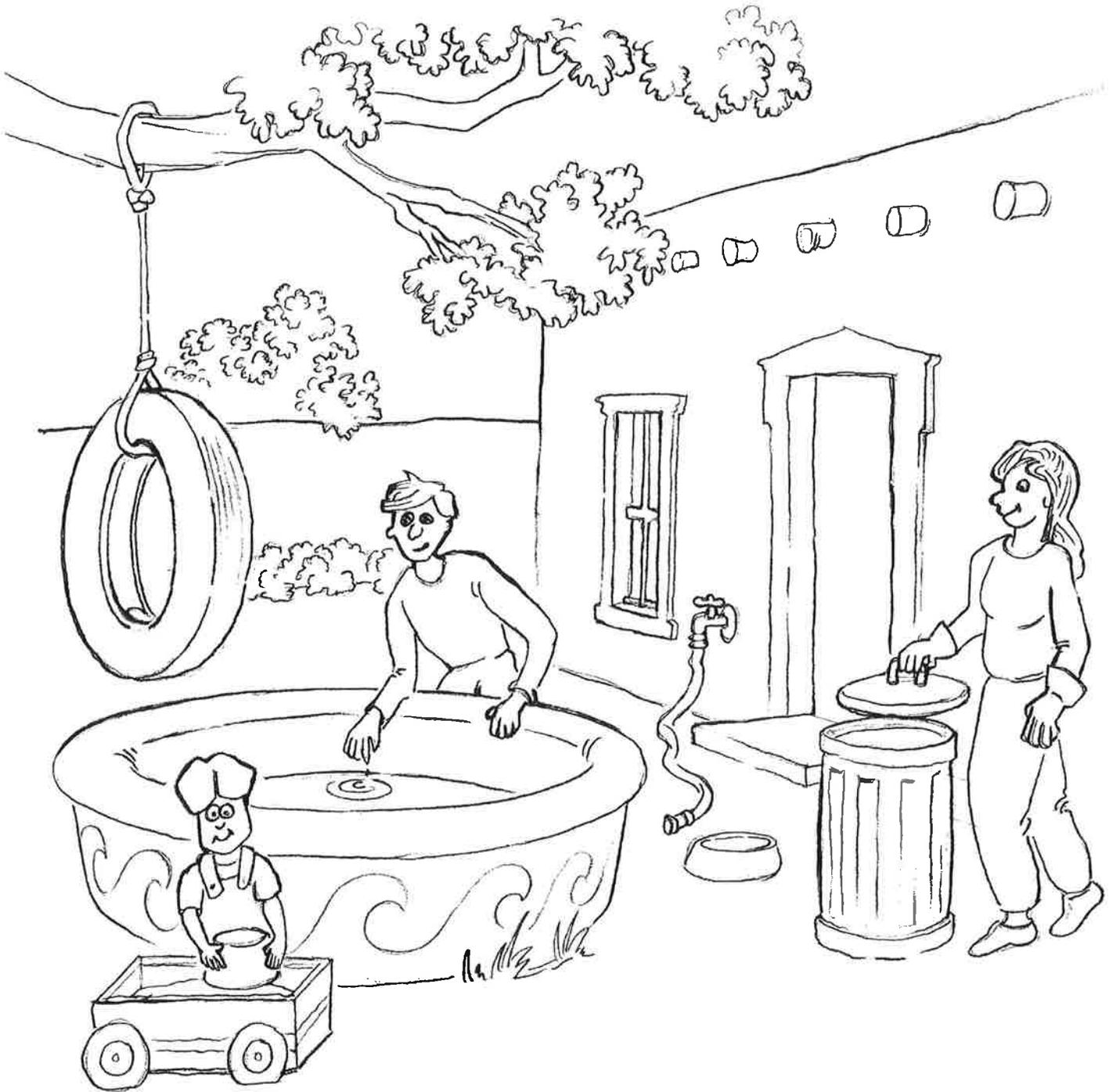
Revisa tu patio para identificar lugares donde se pueda acumular agua. Si encuentras agua en llantas o albercas, pide a tus papás que vean si hay moyotes.

Sometimes mosquitoes spread disease to dogs, horses, and maybe even people! How can you fight the bite and stop mosquitoes at your home?
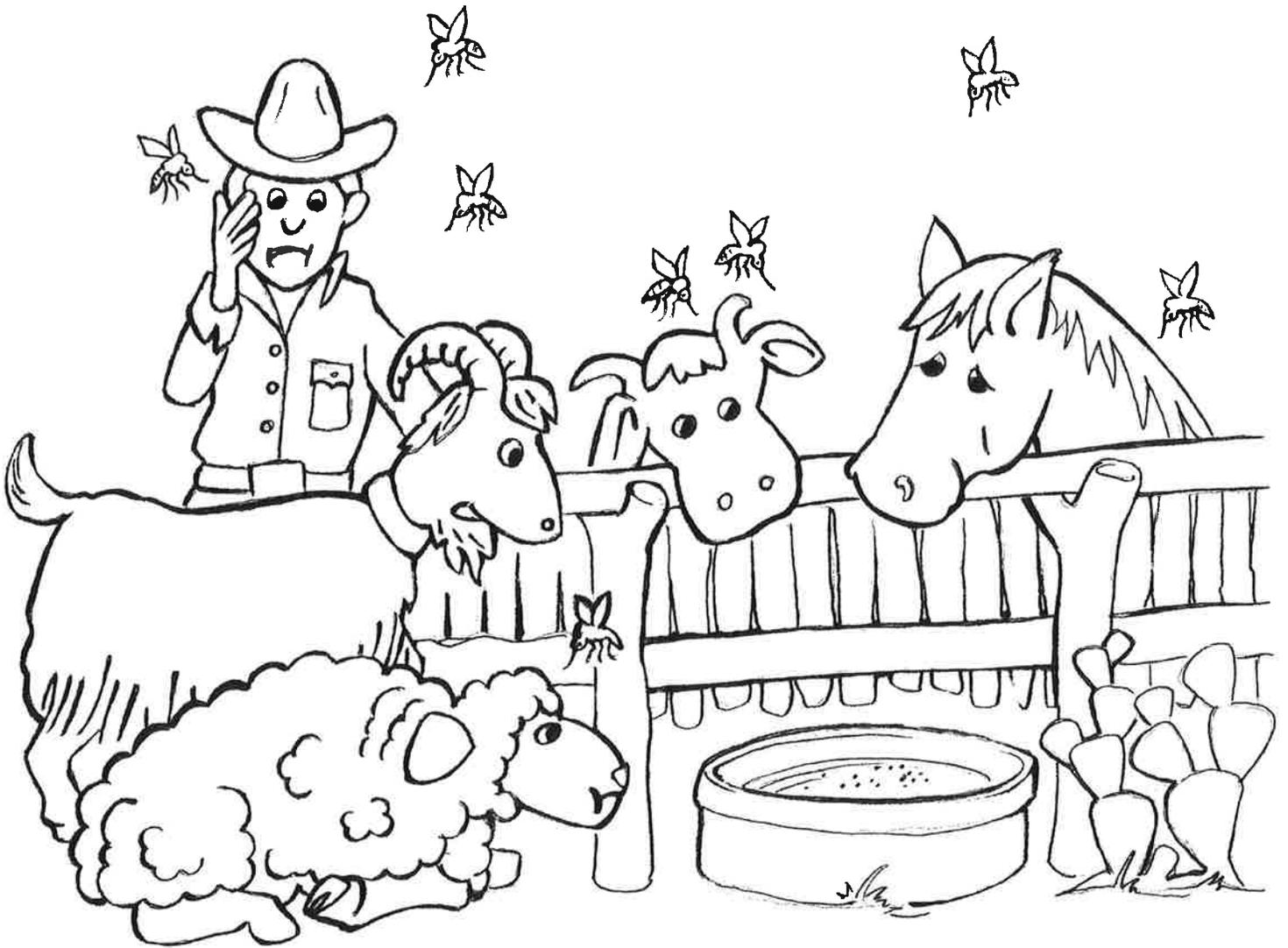
¡A veces, los moyotes transmiten enfermedades a los perros, caballos e incluso a la gente! ¿Cómo puedes evitar la picadura de los moyotes y sacarlos de tu casa?

Change the water and scrub the sides of
bird baths, animal troughs, and pet watering
bowls often to get rid of mosquito eggs. Good
healthy drinking water is what your pets need.

A menudo, limpia y cambia el agua de fuentes
para aves, bebederos de animales y tazones
de agua de las mascotas, para eliminar los
huevecillos de moyotes. Lo que necesita tu
mascota es agua potable de buena calidad.

Vector Vaqueros are mosquito control staff who study the science of controlling mosquitoes. They will safely apply chemicals to reduce the number of mosquitoes.
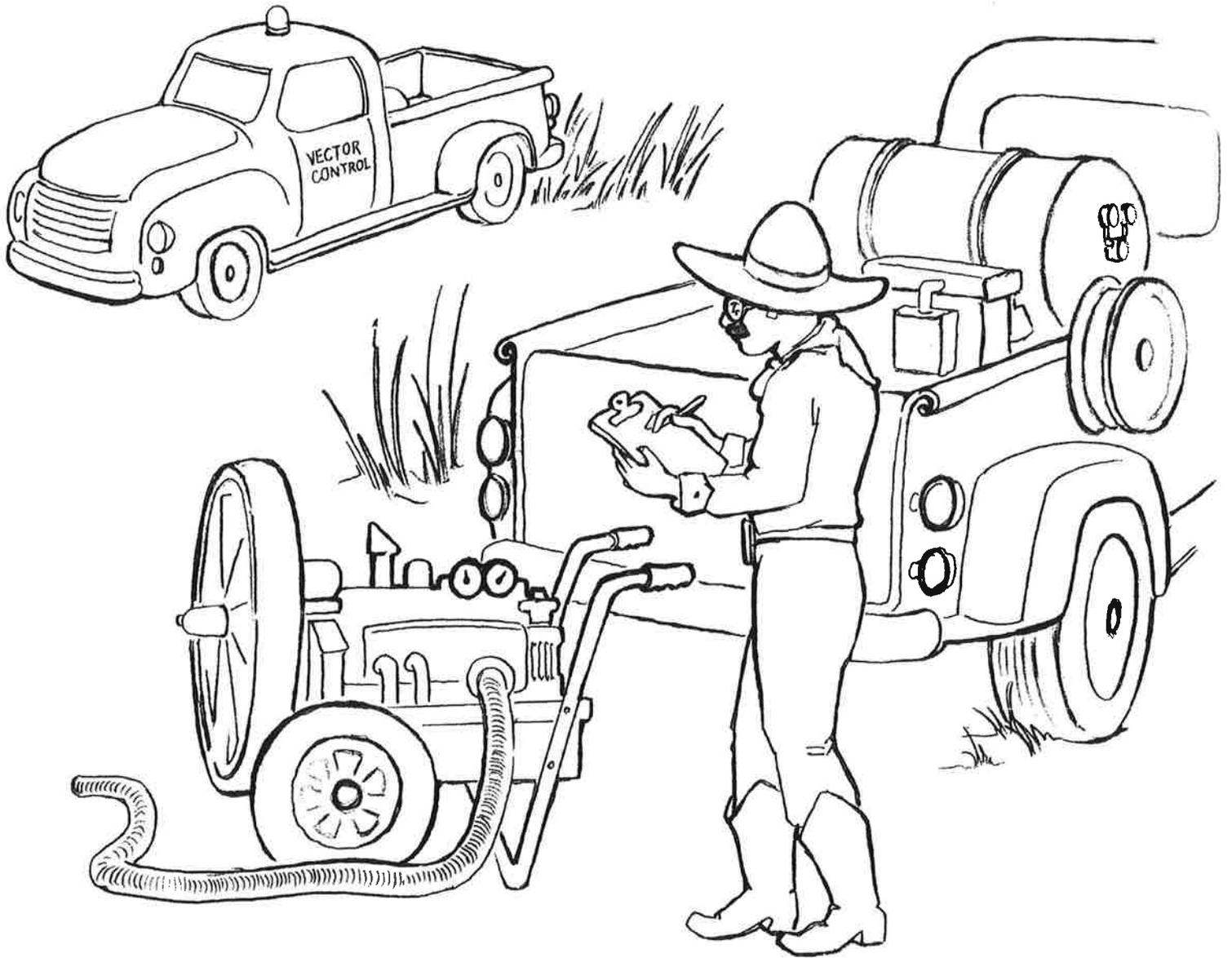
Los Vectores Vaqueros son personas quienes estudian cómo controlar a los moyotes. Cuando es necesario, ellos aplican químicos en forma segura para reducir el número de moyotes.

Vector Vaquero rides forever to fight mosquitoes. If you see water that is near your home, your parents can call for a safety check.
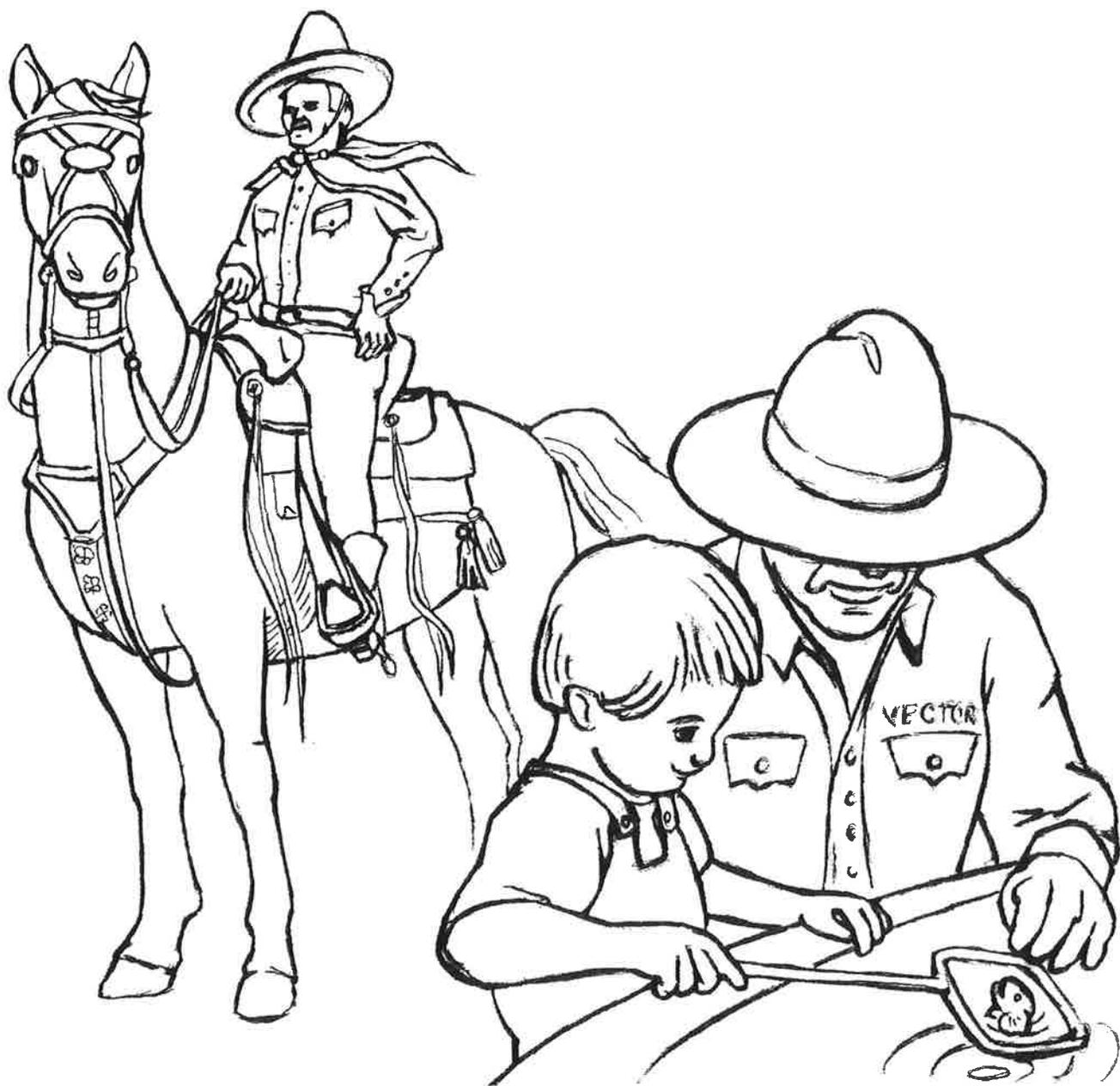
El Vector Vaquero cabalga siempre para luchar contra los moyotes. Si ves agua cerca de tu casa, tus papás pueden llamar para solicitar una inspección de seguridad.

Moving gambusia (mosquitofish) to small ponds is very important mosquito control.

El uso de Gambusia (peces que comen moyotes) en pequeños estanques es una forma de control importante.

All our animal friends thank Vector Vaquero for careful chemical use. Please help protect our wild home, respect our desert and keep it clean.

Nuestros amigos los animales dan gracias a Vector Vaquero, por la cuidadosa forma de usar químicos. Por favor ayúdanos a proteger la Naturaleza, respeta nuestro desierto y mantenlo limpio.

Be a mosquito dragonfly! Use your sharp eyes to watch for water. Show your parents how to spot mosquito wigglers (larva) and tumblers (pupa).
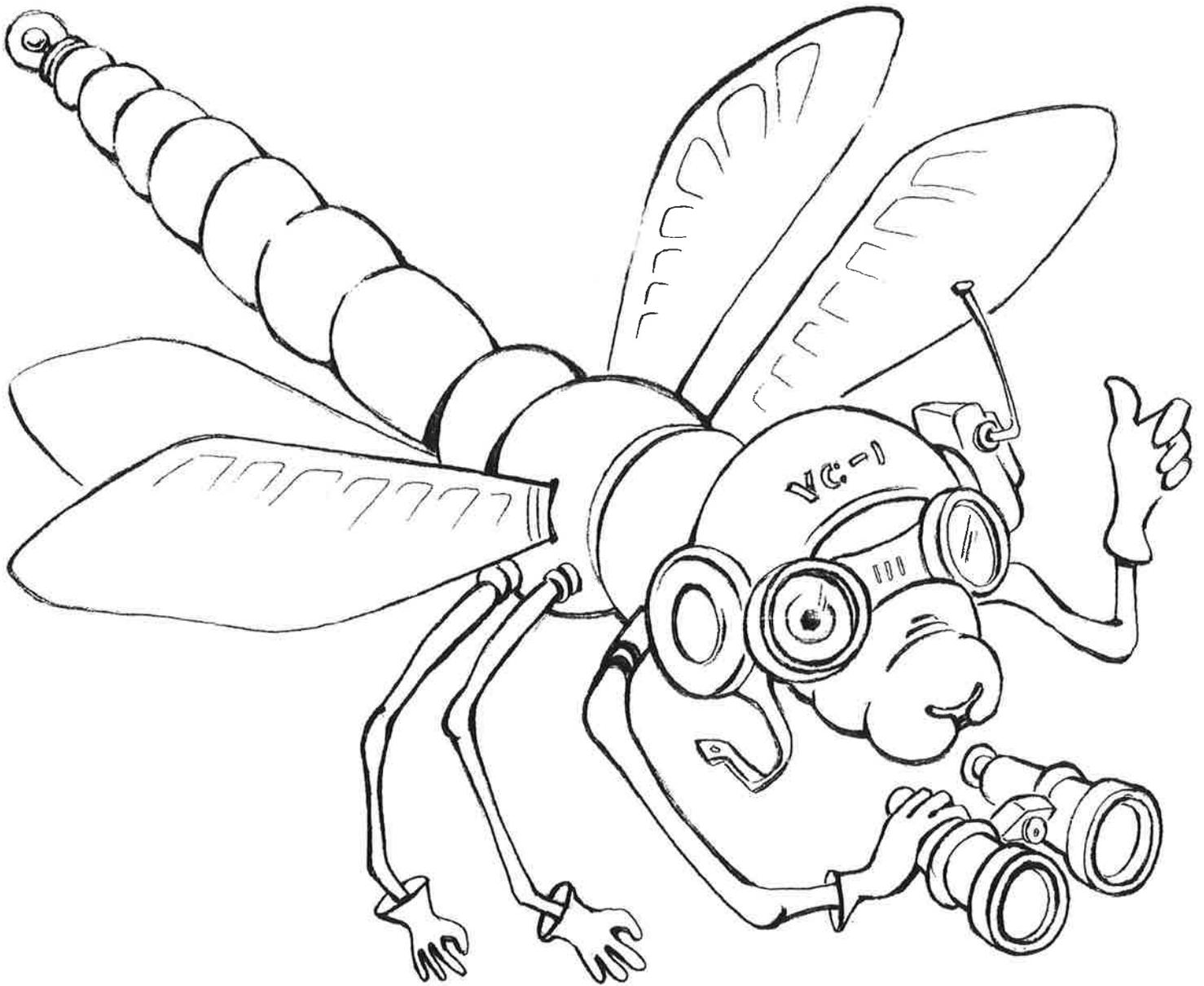
Sé una libélula! Usa tu súper visión para ver el agua. Diles a tus papás cómo detectar larvas y pupas.

Mosquito control people work from swamps to flooded farm fields all the way to backyards such as your home. We do our best work on large areas of standing water. The tool of our trade is a dipper, to catch mosquito larva in the hatch water.
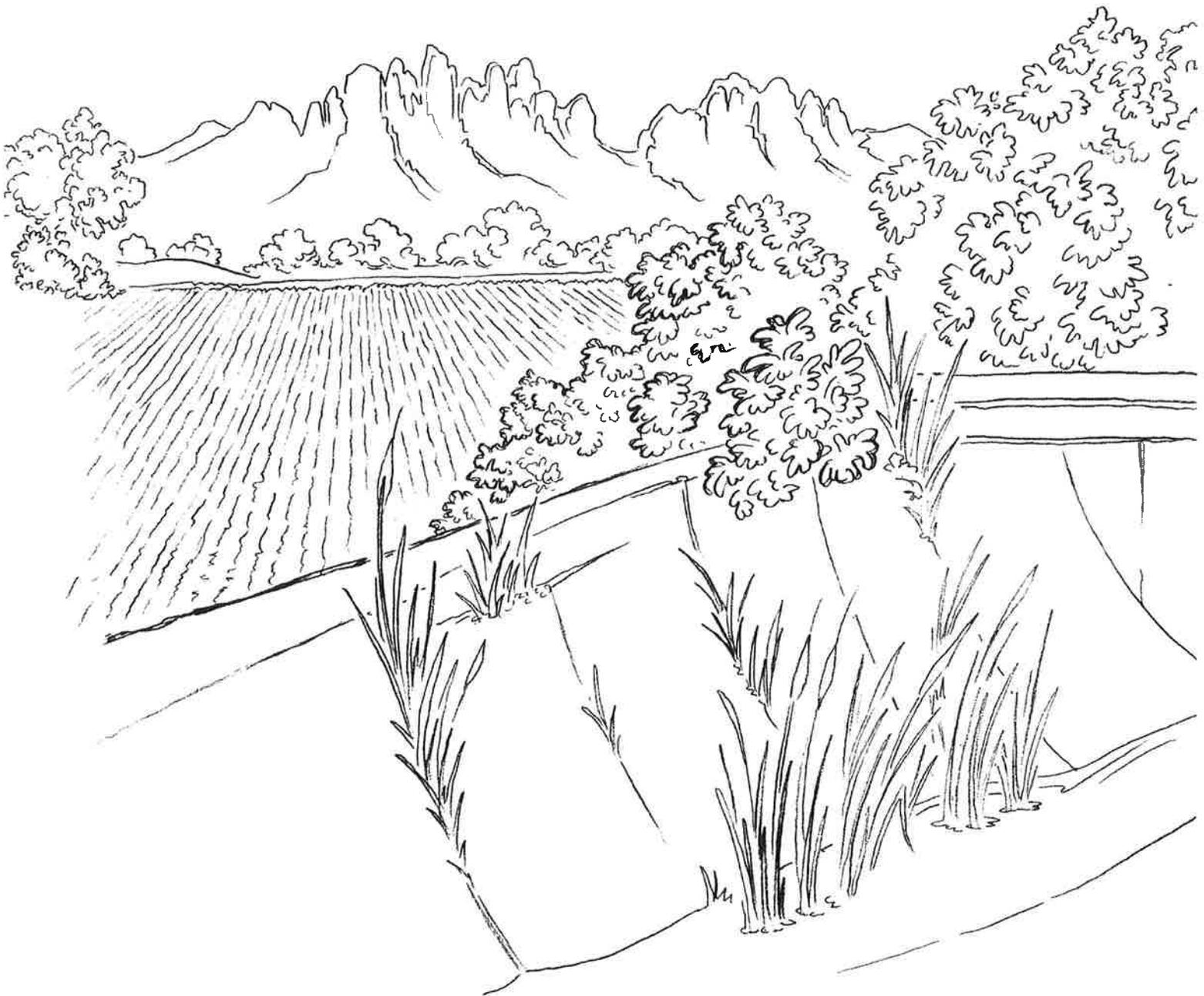
Las personas que controlan moyotes trabajan desde en pantanos y tierras de cultivo inundadas hasta el patio de casas como la tuya. Ellos trabajan lo mejor posible en grandes áreas con agua estancada. Una de sus mejores herramientas es un cucharón de mango largo para capturar larvas y pupas en el agua de donde salen los moyotes adultos.

It is very important to help our neighbors by keeping irrigation channels clean to reduce standing water.

Es muy importante ayudar a nuestros vecinos a mantener limpias las acequias de riego para reducir el agua estancada.

Thank you for helping with keeping your water clean at home. Vector Vaquero truly appreciates your help! Please draw in your pets in the home.

Gracias por ayudar mantener limpia el agua en tu casa. ¡El Vector Vaquero agradece tu ayuda sinceramente! Por favor dibuja tus mascotas en esta casa.

A quick spray keeps the mosquitoes away.
Use repellents.

Una rápida rociada de repelente, aleja a los moyotes.

Can you help
Keeto find his
way to water?

¿ Puedes ayudar a
Keeto a encontrar
el camino al agua?
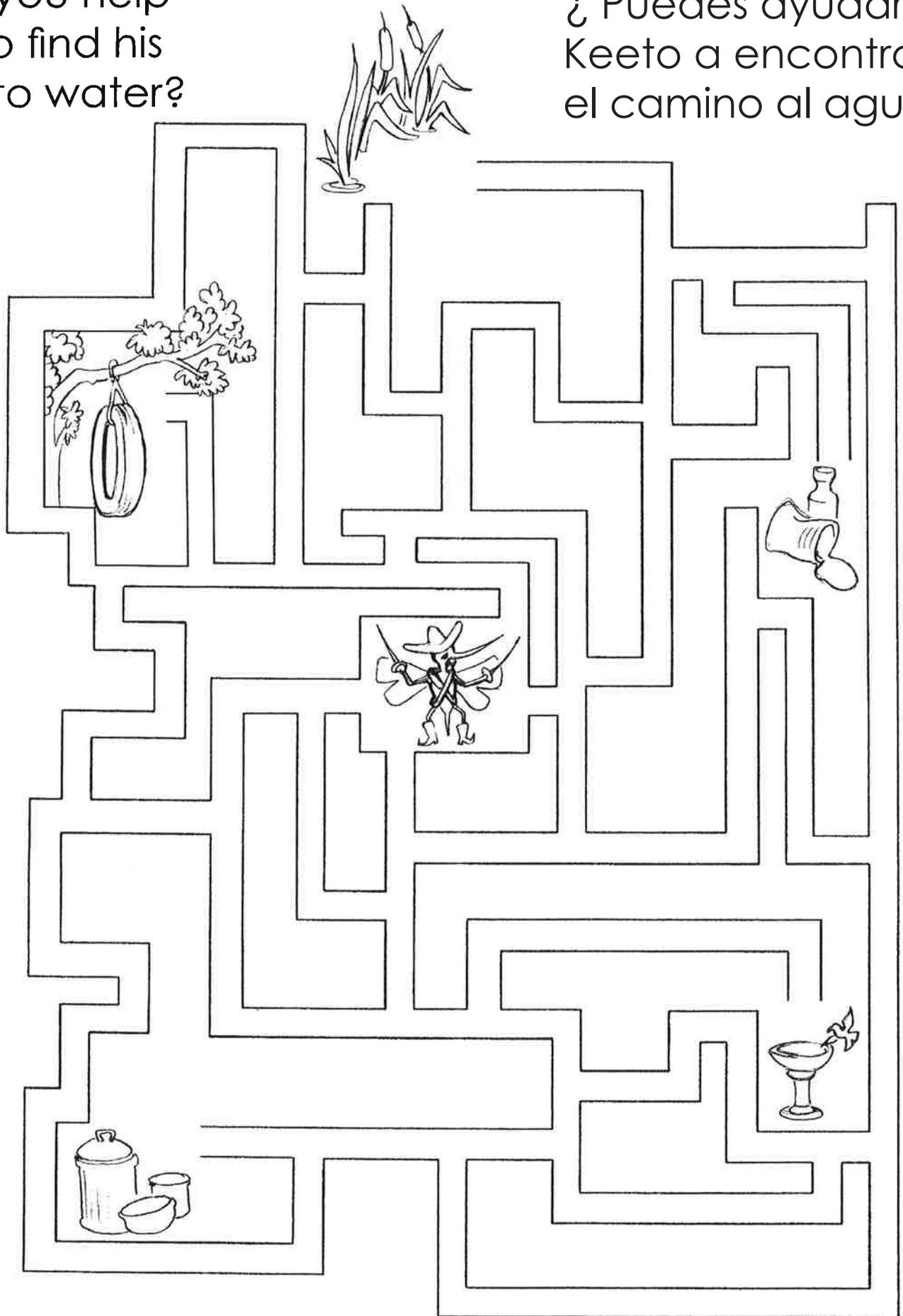
What are **mosquitoes?**

Mosquitoes are **insects**.

What are **insects**?

Adult insects are **animals** that...

Have a body with 3 sections
Most kinds have wings
All have 6 legs
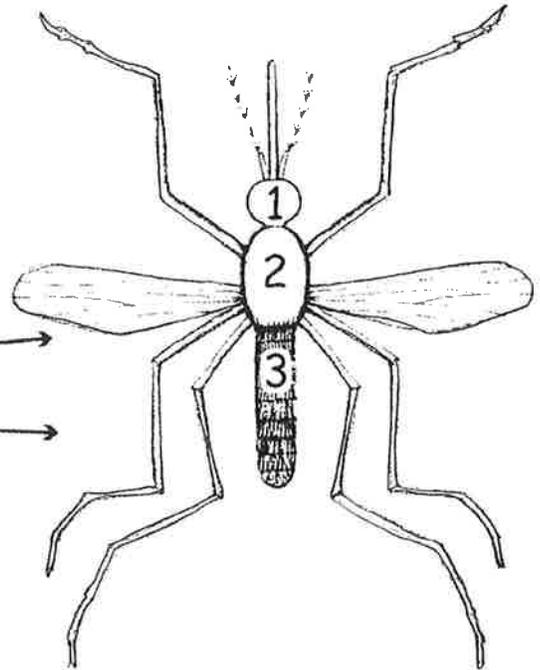
There are lots of different kinds of insects. Write down 3 insects that you have seen before.

_____   _____   _____

Circle the **animals** that are **insects**.
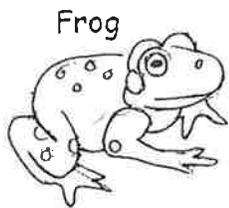
Frog

Butterfly
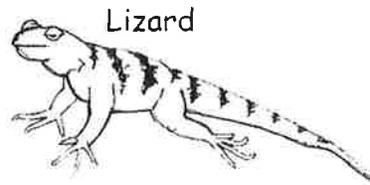
Lizard
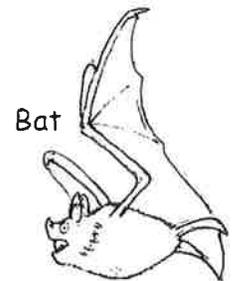
Bat
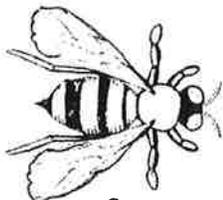
Bee
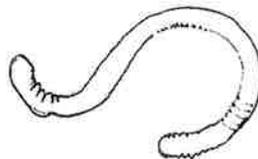
Worm
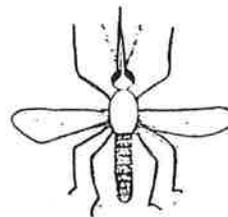
Mosquito
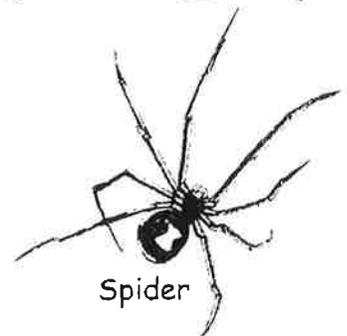
Spider

# Find the Mosquitoes!

NAME _____

DATE _____

1. Color the picture of the pond.

2. Find and **circle** all of the mosquitoes in the picture. Can you find them all?
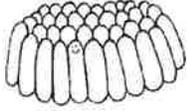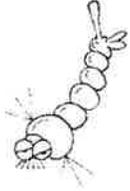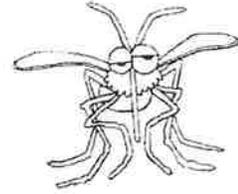
Egg Raft   Larva   Pupa   Adult

3. Write how many you found in the picture.
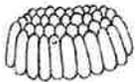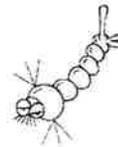
How many egg rafts? _____   How many larvae? _____
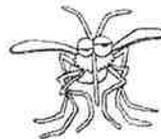
How many pupae? _____   How many adults? _____

Mosquito Predators

NAME _____

DATE _____

Some mosquito predators capture **adult mosquitoes** from the air
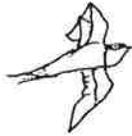
Bats   Insectivorous Birds   Dragonflies   Damselflies
(especially swallows and flycatchers)
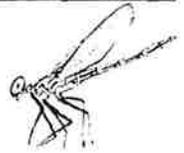
Other mosquito predators hunt for mosquito **larvae** and **pupae** on the surface of the water, below the surface, or crawl underwater along rocks, sticks, or plants waiting for prey.
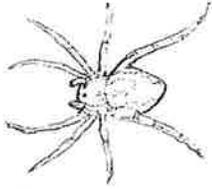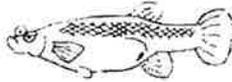
Surface Hunting   Mosquitofish   Dragonfly Naiads   Predaceous Diving   Backswimmers
Spiders   (surface feeders)   (underwater crawlers)   Beetles
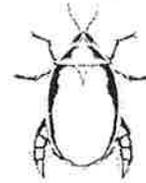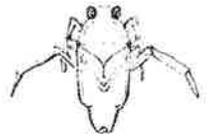
Draw each predator where it would hunt for mosquitoes in this pond habitat.

How a mosquito grows up

1. The eggs are laid in still water.

4. The pupae turns into the adult mosquito, that flies around and bothers you and your pets.
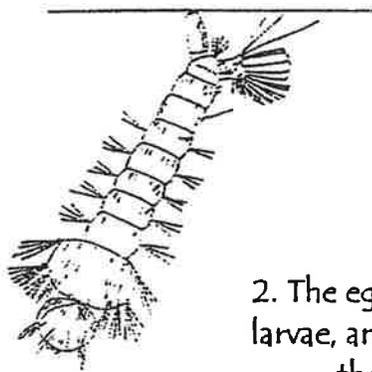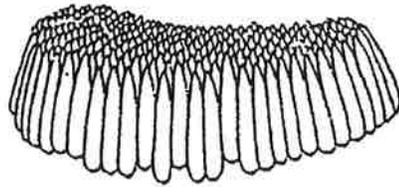
2. The eggs hatch into larvae, and they live in the water.
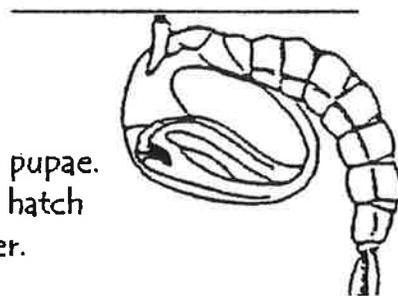
3. The larvae turn into a pupae. This is just before they hatch out from the water.
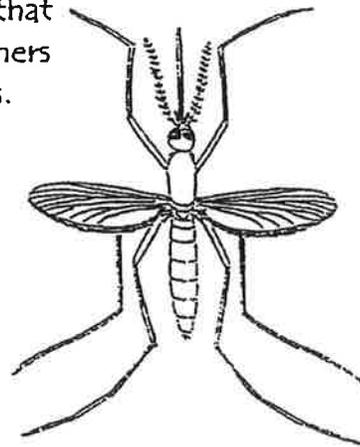
Cómo crece un moyote:
1) Los huevecillos se depositan en aguas tranquilas.
2) De los huevecillos salen las larvas, las cuales viven en el agua.
3) Las larvas se convierten en pupas, las cuales también viven en el agua.
4) De las pupas salen los moyotes adultos que vuelan por todos lados molestándote a ti y a tus mascotas.

NAME _____

DATE _____

Plants

Algae

Dragonfly

Swallow

Eagle

Squirrel

Egret

Owl

Human

Rex (dog)

z z z

Backswimmer

Dragonfly Naiad

Predacious diving Beetle

Mosquitofish

Bass
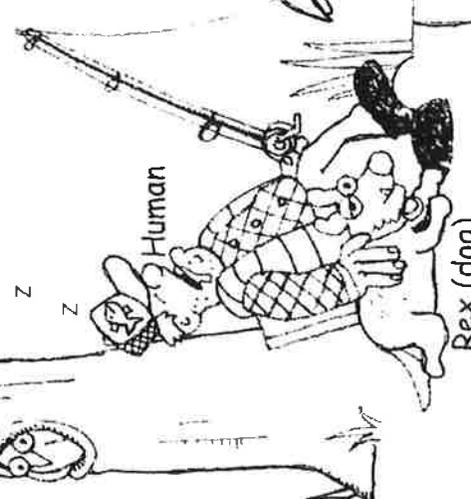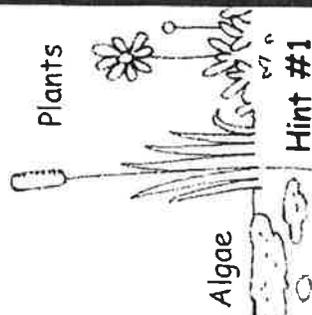
Hint #1 Start at the sun. It starts the photosynthetic process.

Hint #2 Mosquito larvae like to eat something green that floats.

**Hint #3** Mosquito larvae/pupae have many aquatic predators.

Hint #4 Adult mosquitoes will steal blood from many different birds and mammals.

example

?

Food Webs
All organisms need energy (food) to survive. Food webs show how energy is passed from organism to organism.

Mosquitoes play a major role in food webs. Many animals depend on mosquitoes for food, and mosquitoes depend on many animals for the blood that they use to make eggs.

Look at this picture of a pond ecosystem. **Draw arrows to show where the energy is being transferred, (organism to organism).** For example, mosquitofish eat both larva and pupa, so you would draw arrows from the larva and pupa to the mosquitofish. You would also draw arrows from the mosquitofish to any animal that would eat mosquitofish. Use the hints to help you figure out, who eats whom, and who the mosquito steals blood (energy) from.

Word Search Mystery Message

NAME _____

DATE _____

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E X A M M O S Q U E B I G G L A Z E E M R R J A N S S X
B X T H O O R X V A V R E V N Z E I L P L E Y D I S H L A
A C B B D I A M V C A L W A O Y A T O H X T E O Y U E L R O
C G O M S I M A L A W A P L E O L X F R D O S A P K Q F I N T
K O L E I N N W E Z U O F D I V P A R D O O S U P M F E L I H E
W R E D L S W P E T J R O G D C P I P A G O O P G A L E L J Y A
I F D B N E T I J R F D O B M O U X A C G L L I S L V I M I S S T
N L O I S T B I F D O Y S S A T P A R S N M O B P X R O E T I
E Y M R E B M E M P G O Y S Q L C H I K E P N G A M L S E C
R P S P D L A M P T A I A W U I I H O P E Y O X A R K E H K
L O E I B O T A Y D N A R O N Z A E T H I S S M O R E S
A E L P E D E Y L E A R T R D A O N W O R D S E A R C H S
V X A A H O L E T Y T R O N U Y B A T A N M N I B O M R N
A W D T M B T E T D M M N I F A L C M O A N S T E R S G E Y M N Y L
S E U E E E X R A N O O O I A I L C A E M M D A T G E E E L A
B S T D B W P O S T R A G O R B U H M O W A T H I F S N E I G A R
A N I G R S V I I R G O B R U T H L L O O T C U H R A D L E N K A V R A
K L P P G O G G B R U T L M E E L A L T E R W A E S G H N A B N
S P I R I I B O R O N G O B E W A I N S S E T X Q X O S X T I N G E A B X
W E R A O N A G U B E F E M O N S W Y R E T X D U M P S R E X A P
I V S F R R N Y B E L H I T X A M O N O V V Q I T X S E M U P L
M R U F E A L I R E L I H M L A I E M O S H C X M I T X E M E U
E U N R A L N F D I U X Q S Y S U S E H E D O O D I P A I O L D
R B P S E T R D S A T O H T M A D U I R A A I B C O N T R O L U
E E C A R D I X Q E S Q T O M H A U I R E A L A S O O Z Z K I C Q A D S
S T L A N T T O I R S T O M M D U I R E L G S O C I L E B A U A M
T L P U D O O R G E T Q S A Q Q M S O N I E S N I I O S T Q U I
A U A N S T O G R L E S T O T M T H A P I I R E L O N S C B L D
M A T G W E E L R F W O L L L L E P M O N G E B I T T R A L A M
E D O R R E O S R S F T E R R F H X T N E T G E
A T D R R O S R T E G R T D O N T
S D G W E P R E T T E R F H X
K U D R O S E T T E G R T
U E G G R A F T E G R T D O N
```

Find ALL of these Mosquito School words...

__ MOSQUITOES	__ PIPETTE	__ BLOOD	__ BAT
__ INSECT	__ PETRI DISH	__ DRAGONFLY	__ DAMSELFLY
__ HEAD	__ EXAMINE	__ BACKSWIMMER	__ WEST NILE
__ THORAX	__ ESTIMATE	__ DIVING BEETLE	VIRUS
__ ABDOMEN	__ MEASURE	__ MOSQUITOFISH	__ YELLOW FEVER
__ VIAL	__ GRAPH	__ SPIDER	__ MALARIA
__ MAGNIFYING GLASS	__ BEHAVIOR	__ FROG	__ SUCK
__ EMERGENCE CAGE	__ FEMALE	__ BIRD	__ SOURCES
__ LARVA	__ PUPA	__ EGG RAFT	__ ADULT

How to solve the mystery message... After you have found ALL of the words in the word search, write down the 4 words from the list above that are BOTH **backwards** AND **diagonal**. Use those four words to fill in the mystery message on the lines below.

___ ___ ___ ___   ___ ___ ___ ___ ___   ___ ___ ___ ___ ___   ___ ___ ___ ___ ___!

¡El tiempo usado en la educación de los niños, es un tiempo bien usado!