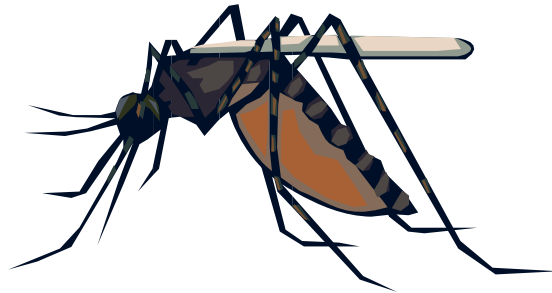


Mosquitoes

The Deadly Pest

Teacher Booklet



TEXAS A&M
AGRI LIFE
EXTENSION

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Adapted from a previous version "Controlling Mosquitoes Around Your Home" by Kimberly Schofield and Jeffery Tomberlin, formerly of Texas AgriLife Extension.

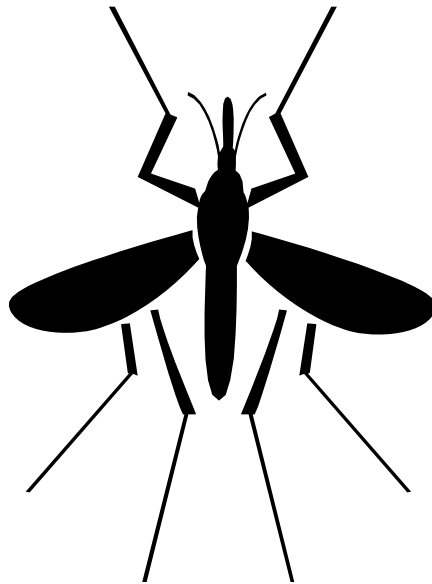
Preface

Mosquitoes are a type of fly and can be found nearly anywhere in the world, from the tropics to the Arctic. There are at least 85 different species of mosquitoes in Texas, and more are being brought into the United States.

Each mosquito species can be very different from one another, but nearly all species can find and bite people. Mosquitoes are the biggest medical threat to humans. They can cause different diseases like West Nile, Malaria, and Yellow Fever. These diseases kill millions of humans around the world.

One type of mosquito called *Anopheles* transmits malaria to humans in more than 100 countries and causes 2.5 million deaths every year!

In this booklet you will find a series of exercises and reading passages to assist with educating your students about mosquitoes, their lifecycle, and how they can reduce mosquito populations around their homes.



Lesson 1 – An Introduction to Mosquitoes

Overview:

Students will read the following passage in the classroom and then answer relevant questions pertaining to the passage. Students will get an overview of the mosquito body and body parts.

Instructions:

Read the passage either in groups or as a class.

Objectives:

Students will be able to recognize a mosquito from other insects.

Students will be able to recognize the body parts of a mosquito and what they are used for.

Students will learn the different between male and female mosquitoes.

TEKS:

3.10a, 3.11b

5.10a

Materials:

Handouts of the reading exercise OR

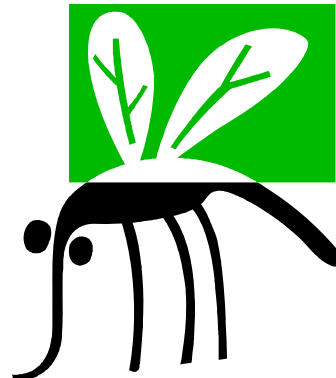
Student booklets of the module OR

Overhead copy of the reading exercise

Wrap up questions for Lesson 1

Activity 1-1

Activity 1-2



Lesson 1 – An Introduction to Mosquitoes

Questions to ask before reading the passage:

What is an insect?

Are mosquitoes insects?

Do all mosquitoes bite people?

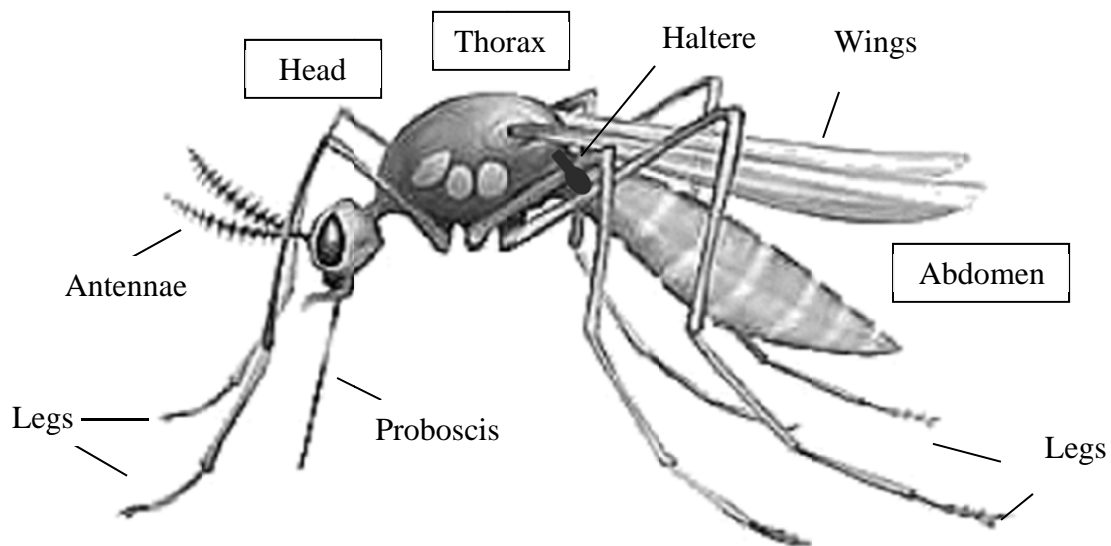
Can you tell the difference between a male or female mosquito?

Reading Exercise:

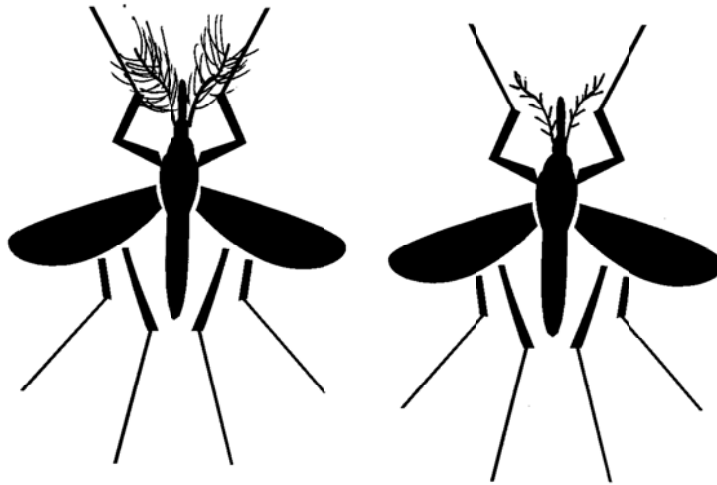
Mosquitoes are insects known as flies. Insects are animals with three body parts, six (6) legs, antennae and sometimes wings.

A mosquito has three body parts called a head, thorax, and abdomen. Mosquitoes also have six long, skinny legs, one pair of **antennae**. Most insects with wings have two pairs of wings, but mosquitoes have only one. Their second pair of wings look like knobs and are called **halteres**. Halteres help mosquitoes keep their balance when they fly.

A mosquito has piercing sucking mouthparts. These mouthparts are long and shaped like a tube called a **proboscis**. The proboscis helps mosquitoes suck their food. Only the **female** mosquito feeds on blood. Females need the protein in blood to make eggs. **Male** mosquitoes do not feed on blood. Both males and females feed on nectar and other sugar sources as their main source of food. Males have a very flexible proboscis that cannot pierce skin like female's can.



You can tell the difference between **male** and **female** mosquitoes by looking at their antennae. Male mosquitoes have fluffy, feathery antennae. Female mosquitoes have smaller antennae. Mosquitoes and other insects use their antenna for many reasons, but one reason is to smell. Male mosquitoes can smell females using their antennae. The larger or fluffier their antennae, the easier it is to smell a female. This is why males have bigger antennae than females.



Male Mosquito

Female Mosquito

Wrap Up Questions:

What are some characteristics of insects? Three body parts (head, thorax, abdomen), six legs, antennae, and sometimes wings.

Are mosquitoes insects? Yes.

How many wings to mosquitoes have? One pair, or two wings total.

Instead of having a second pair of wings, what do they have? What is it used for? Halteres. For balance during flight.

Do all mosquitoes suck blood? No, only females.

How can you tell the difference between male and female mosquitoes? Males have fluffier antennae, females have smaller antennae.

Activity 1.1

Mosquito Antennae

Materials:

Pipe cleaners

Feathers

Head bands

Beads

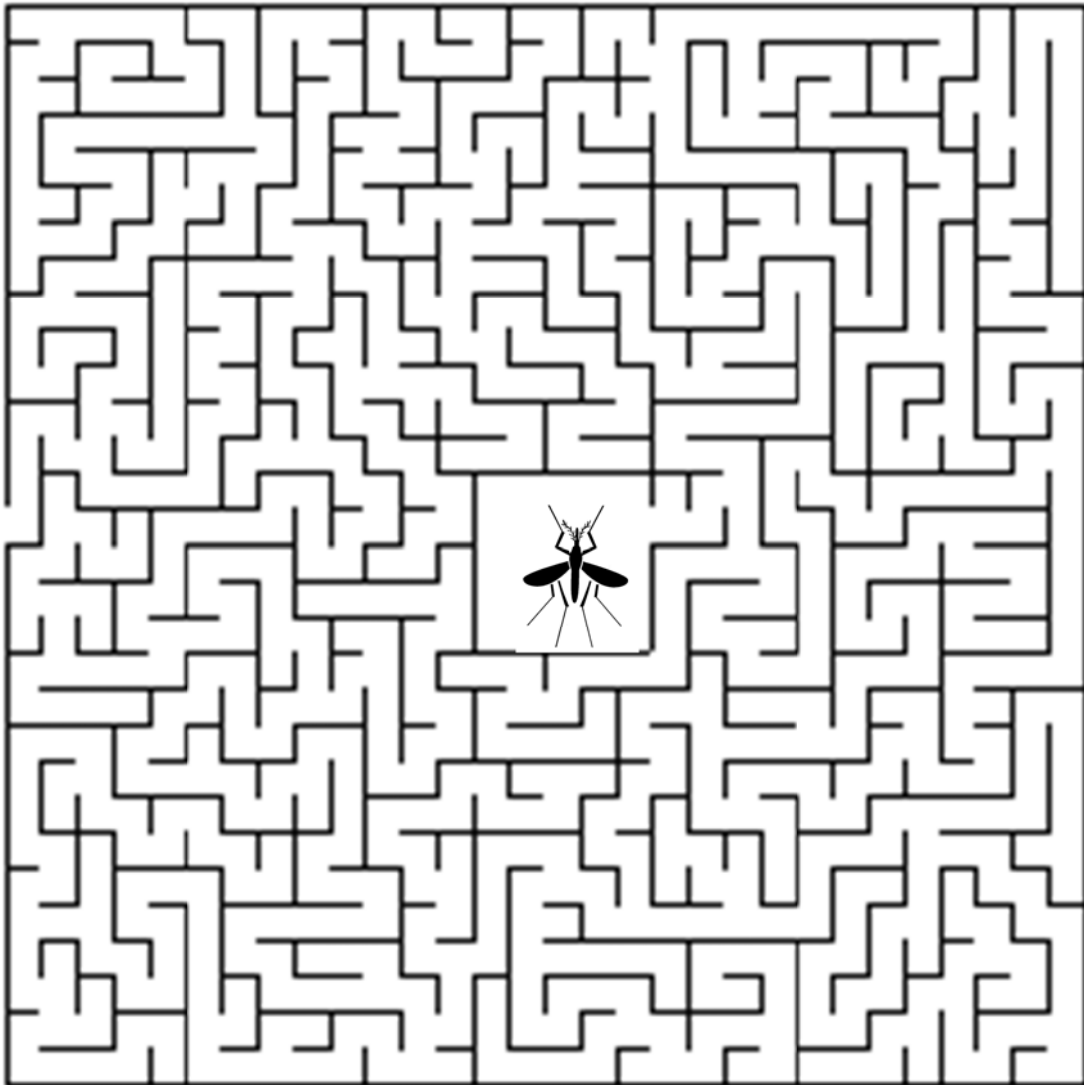
Other such craft items

Instructions:

After reading lesson 1 and learning about the difference between male and female mosquitoes, have students build mosquito antenna using the materials you provide. Male students should have the largest, “fluffiest” antennae, while female students should have more slender antennae.

Activity 1.2 Mosquito Maze

Help Marvin navigate the maze to find his mate Mazzie.



Lesson 2 – The Life of a Mosquito

Overview:

Students will read the following passage in the classroom and then answer relevant questions pertaining to the passage. Students will understand the life stages of a mosquito.

Instructions:

Read the passage either in groups or as a class.

Objectives:

Students will be able to recognize the four mosquito life stages.
Students will be able to understand why mosquitoes require water for survival.
Students will learn the function of each life stage of a mosquito.

TEKS:

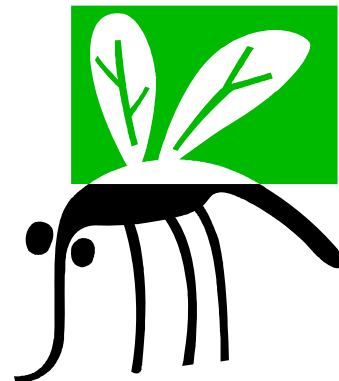
3.10a, 3.11b, 3.12c

4.10c

5.10a, 5.10c

Materials:

Handouts of the reading exercise OR
Student booklets of the module OR
Overhead copy of the reading exercise
Wrap up questions for Lesson 2
Activity 2-1
Activity 2-2
Activity 2-3



Lesson 2 – The Life of a Mosquito

Questions to ask before reading the passage:

What are the life stages of an insect with a complete lifecycle?

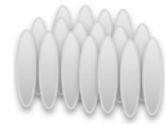
What are the stages of a mosquito's lifecycle?

Why do are mosquitoes always found around water?

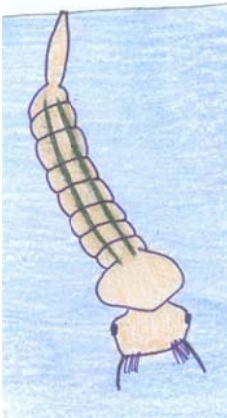
Reading Exercise:

Mosquitoes are an insect with a complete lifecycle. Insects with a complete lifecycle have four stages: an egg, larva, pupa and adult.

The first stage of a mosquito is the egg stage. A female mosquito lays her eggs on the surface of the water after she has taken a blood meal. Some species of mosquitoes lay their eggs glued together in a raft. Other species lay their eggs singly. Mosquitoes do not like to lay their eggs in clean or fast running water. They prefer water with a lot of shade, water that is still, and water that is at least a little dirty with algae or leaf litter. About one day (24 hours) after the mother mosquito lays her eggs they will hatch.



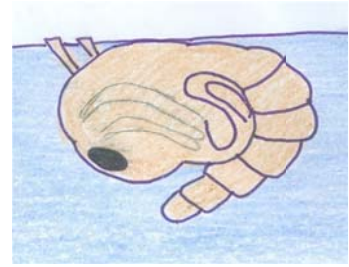
Mosquito egg raft



When the egg hatches the second life stage will emerge. It is called the larva. The larva looks like a tiny worm or tadpole; it has a head and long body, but no legs. It lives in the water, swimming around and finding its food in the water. Mosquito larvae are called wigglers because they wiggle when they swim under the water surface.

Mosquito larvae breathe by sticking a tube called a **siphon** above the water surface. This siphon is attached to their abdomen, so they hang upside down in the water. The job of the mosquito is to eat and grow. Mosquito larvae feed on organic matter, bacteria and algae in the water. This is why dirty water is so important to their survival. Mosquito larva shed or **molt** their skin four times, growing each time they molt. A mosquito lives in the larva form for 7 to 14 days. The warmer the temperatures, the faster they grow.

After the mosquito larva has molted four times, it will shed its skin and become a pupa. A mosquito pupa is unique because it swims and moves. Most other insect pupae are still and quiet. Mosquito pupae do not eat anything. They float just below the water surface and breathe through tubes called **trumpets**. Mosquito pupae are called tumbler, because when they move, they tumble or do flips in the water. Mosquito stay in the pupa stage for one to four days.



Once the mosquito is ready, the pupa will come to the surface, shed its exoskeleton, and very carefully climb out as an adult. The water must be very still, because if the adult mosquito gets wet trying to come out the pupa skin, it will not survive. Once the mosquito flies away it must find food to get energy. Both male and female mosquitoes will eat nectar. After a few days the female will go in search of a blood meal so she can lay her eggs and start the cycle all over again. Mosquito adults only live about two weeks.



Wrap Up Questions:

What are the four stages of a mosquitoes lifecycle? Egg, larva, pupa, adult

What type of water does a mosquito need to survive? Still, shaded, dirty water

Why does a mosquito need this type of water? The larvae need the dirty water to eat and the water must be still so the adult can emerge.

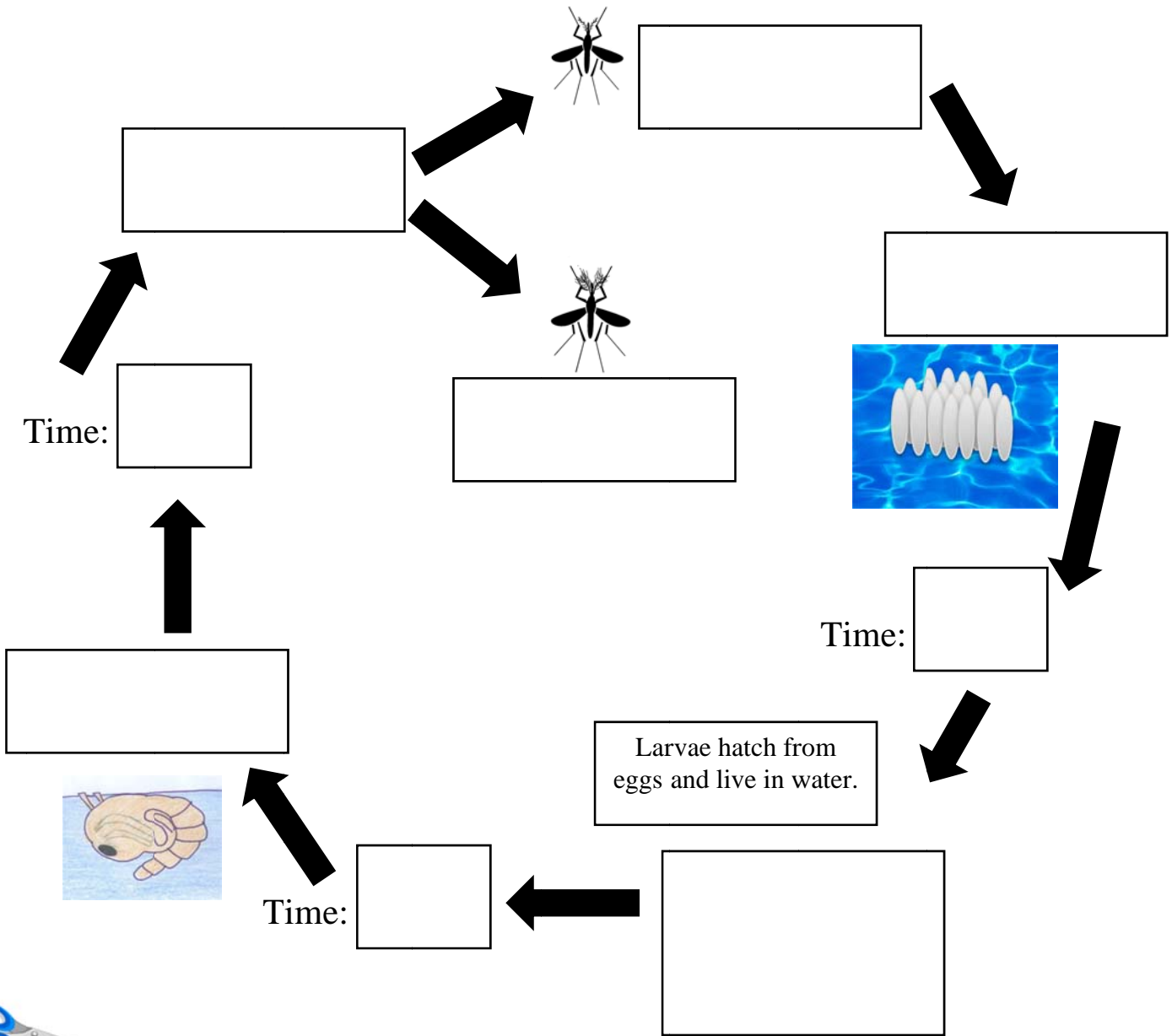
What is a mosquito larva called? Why? Wiggler because it wiggles when it swims

What is a mosquito pupa called? Why? Tumbler because it does flips or tumbles when it moves in the water.

How long will it take a mosquito to go from egg to adult in the hot summer? About 9 days (1 day for egg, 7 days for larva, 1 day for pupa).

Activity 2.1 Mosquito Lifecycle Wheel

Complete the mosquito lifecycle wheel. Place the phrases or pictures in the correct order to illustrate the mosquito lifecycle.



Male mosquitoes feed on nectar and find mates

Pupae shed exoskeleton & emerge as adults.

Female mosquitoes find a blood meal.

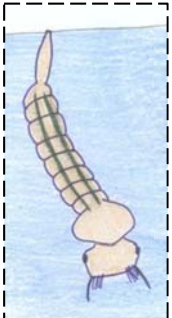
Female mosquito lays eggs on water surface

Larva shed skin and emerge as a pupa.

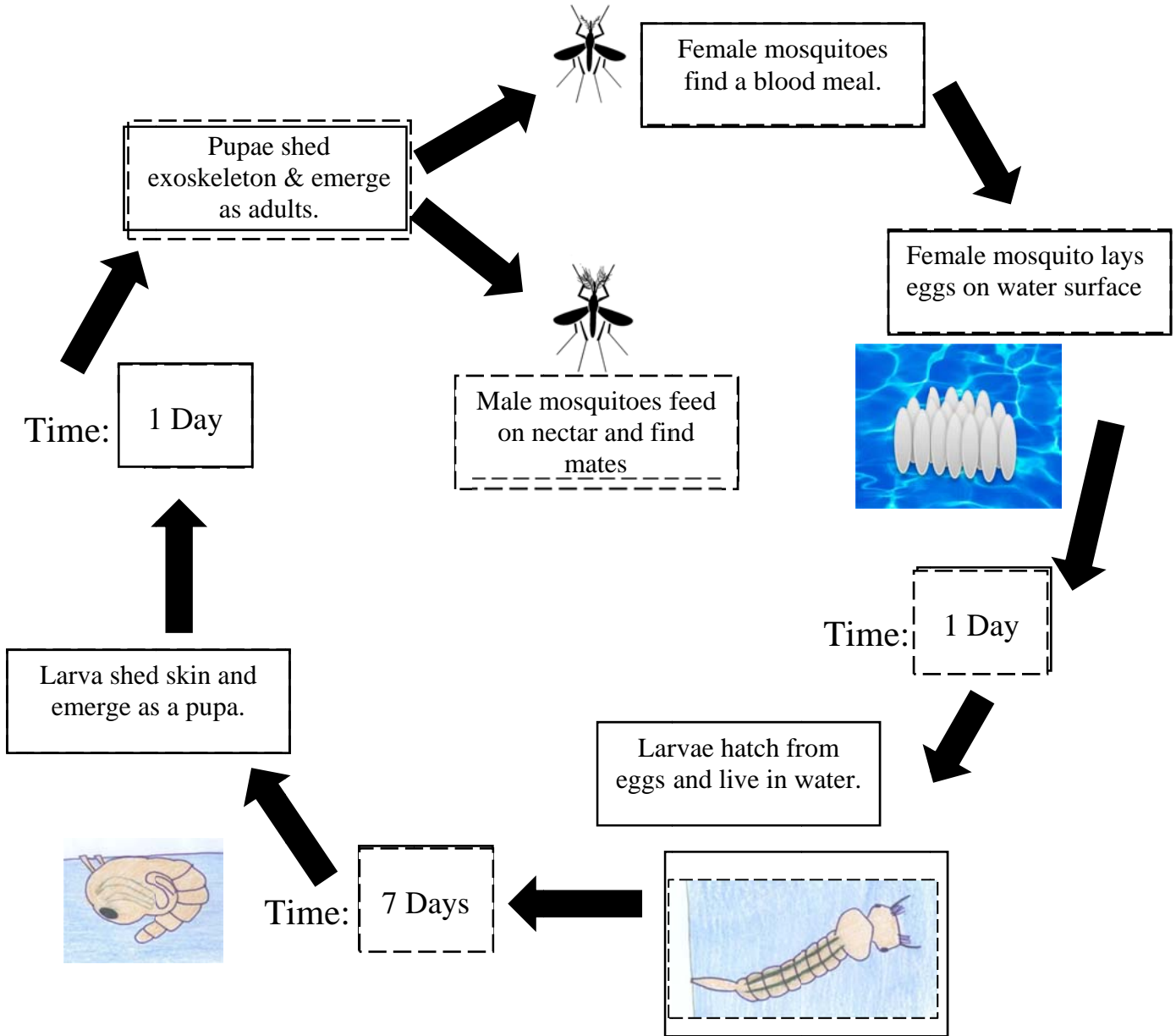
1 Day

1 Day

7 Days



Activity 2.1 - Key Mosquito Lifecycle Wheel



Activity 2.2 Mosquito Lifecycle Matching Game

Individually or in teams, match the facts and phrases to the mosquito life stage they correctly describe.

Egg

Larva

Pupa

Adult

Molt 4 times

Are found outside of water

Also called wigglers

Also called tumblers

Finds food in water

Can fly

Breathe through trumpets

Breathe through siphons

Are the only stage to suck blood

Spend only 24 hours or so in this stage.

Need a blood meal to form

Feed on nectar

Can be glued together in a raft

Do not eat but can swim

Purpose is to eat and grow

Never shed their exoskeleton

**Activity 2.2 - Key
Mosquito Lifecycle Matching Game**

Egg

Larva

Pupa

Adult

Need a blood meal to form

Molt 4 times

Also called tumblers

Are found outside of water

Can be glued together in a raft

Also called wigglers

Breathe through trumpets

Can fly

Spend only 24 hours or so in this stage.

Finds food in water

Do not eat but can swim

Never shed their exoskeleton

Breathe through siphons

Are the only stage to suck blood

Purpose is to eat and grow

Feed on nectar

Activity 2.3

Mosquito Lifecycle Experiment

Materials:

Container, bucket, large bowl, etc.
Water
Leaves, hay, straw (other organic matter)
Magnifying glasses



TEKS:

3.2a, 3.2f, 3.4a, 3.9a, 3.9b, 3.9c, 3.10a, 3.10b, 3.10c
4.2a, 4.2f, 4.4a, 4.9b, 4.10a
5.2a, 5.2c, 5.4a, 5.9a, 5.9c, 5.10a, 5.10c

Instructions:

Place a container with water outside in a partly sunny area. Add some leaves, straw, hay or pollen to the container. Be sure the temperature is at least 75°F. Early fall and late spring are the best times of the year. Leave containers outside for at least 2 weeks and observe the mosquito activity. Eggs will appear as rafts or single, long oval shapes. Initially they are white, but will harden and change color to grey, brown. Depending on temperatures, eggs will hatch and larvae will be noticeable under the water surface within 1-3 days.

Observe how the mosquito larvae and pupa spend their time when calm. What happens when you disturb the water? Where do they spend most of their time? Can you find the siphon tubes or trumpets?

If temperatures are in the high 90's, it is best to put the water out mid-week, this will allow students to observe both eggs and larvae and when returning from the weekend, pupa should be present.

After pupae are present, be sure to dump out the water to prevent breeding adult mosquitoes.

Discussion Questions:

1. What adaptations do mosquito larvae and pupae have on their bodies to help them survive in the water?
2. What behavioral adaptations do they have to help them live in the water?
3. What changes to the environment would cause mosquito populations to decline? To increase?
4. Mosquitoes may be harmful, but what benefits do you think they provide, specifically to the ecosystem and food web? What would happen if mosquitoes were eradicated?

Lesson 3– Mosquitoes: A Dangerous Pest

Overview:

Students will read the following passage in the classroom and then answer relevant questions pertaining to the passage. Students will understand the risks of mosquitoes to humans and animals.

Instructions:

Read the passage either in groups or as a class.

Objectives:

Students will be able to understand the relationship between hosts and vectors.
Students will be able to understand how mosquitoes transmit diseases.
Students will be able to understand why mosquitoes are such a dangerous pest.

TEKS:

Materials:

Handouts of the reading exercise OR
Student booklets of the module OR
Overhead copy of the reading exercise
Wrap up questions for Lesson 3
Activity 3-1

Lesson 3– Mosquitoes: A Dangerous Pest

Question to ask before reading the passage:

Which animal do you think kills more people every year than any other animal?

Do you think mosquitoes are harmful?

What can mosquitoes do to us and animals that make them so dangerous?

Can you name some diseases that mosquitoes can give us?

Reading Passage:

Even though we are used to having mosquitoes buzzing around us in the summer, mosquitoes are a very deadly pest. In fact, mosquitoes are the deadliest animals in the world. They kill more people than any other animal does. Mosquitoes are the cause of the most deaths because they can **transmit** or give us diseases.

Mosquitoes are called **vectors**. A vector is an animal that carries a disease causing organism. A disease causing organism is something that actually makes you sick such as a virus or bacteria. Mosquitoes don't make you sick; it is what they give us when they bite us that make us sick. When mosquitoes bite humans or other animals, they can transmit disease causing organisms such as viruses in their saliva.

Why does a mosquito bite itch? Mosquito bites itch because when a female mosquito bites you, she injects saliva or spit. Her saliva keeps your blood from clotting so she can drink easily. It is her saliva that makes the bite itch.

Mosquitoes can transmit diseases like **West Nile Virus, Malaria, Yellow Fever,** and **Zika**.

Yellow Fever is a disease that has killed hundreds of thousands of people over the years. Between 1793 and 1900 half a million people died from Yellow Fever! In Texas, many of the people in Houston suffered from Yellow Fever because it is near water and ships brought people and mosquitoes with the disease. Now, Yellow Fever is more common in Africa and South America. If you travel to those parts of the world, you can get a vaccine to keep you from getting Yellow Fever.

Malaria is another horrible disease that has killed millions of people around the world, but is especially bad in Africa, Asia, India and South America. Malaria means “bad air” because people who get the disease usually live or spend a lot of time around swamps with humid, sticky air. People thought it was the air that was making them sick, but it was really the mosquitoes that like to lay their eggs in the swamp.

In the United States, we are lucky, because Yellow Fever and Malaria are not common. However, every year people travel to different countries and contract Yellow Fever and Malaria and bring it home. In the United States we have the same species of mosquitoes that they do in Africa, Asia, and South America. It is possible to have outbreaks of Malaria or Yellow Fever in the United States.

The United States does have a disease called West Nile Virus. Every summer, there are cases of the disease. Some people barely know they are ill, while some get very sick, and others may even die.

The best thing you can do to protect yourself from mosquitoes and the diseases they carry is to avoid them. Stay indoors when mosquitoes are looking for food, which is dawn and dusk. Wear clothes that are loose and cover your body if you must be outside. Also wear insect repellent to keep mosquitoes from biting.

Most importantly, make sure you don't have mosquito breeding sites! Drain standing water so mosquitoes can't lay their eggs.

Wrap up questions:

Why are mosquitoes so deadly? Because they transmit disease causing agents that make us sick.

What disease do mosquitoes transmit that we have in the United States every year? West Nile Virus

Why does a mosquito bite itch? The female injects her saliva to keep the blood from clotting and the saliva itches.

What can you do to protect yourself from mosquitoes? Stay indoors during dawn and dusk; wear loose, long clothing; use insect repellent and drain standing water.

Activity 3.1

Spread the Disease!

This activity demonstrates how quickly diseases can be transmitted by mosquitoes carrying the disease and humans who already have the disease.

Materials:

Deck of cards; 4 different colored notecards, etc.

Instructions:

Split the class into two even groups. One group is the mosquitoes, the other are the humans.

Save one color (EX: red) or suit (EX: diamonds) and put it to the side. These will designate West Nile Virus.

Give each student but one mosquito and one human cards. Make sure each student has only one color or suit in their hand.

Now split the saved suit or color in half and give one half to the remaining mosquito and the other to remaining human.

Allow the mosquitoes to get up and “bite” the humans.

With each bite, students must trade some cards – so that after the activity ends, each student should have nearly all the colors or suits in their hand.

Allow the activity to play out for 1-2 minutes.

Instruct mosquitoes to sit down again.

Ask the students to raise their hand if they have X, Y, Z color or suit.

Now ask who started with a red card / diamond suit – only one human and one mosquito should raise their hand.

Now ask the students to see if they are holding a red / diamond card.

Originally only one mosquito and one human carried West Nile. Now the entire class has the disease!

Lesson 4 – Mosquitoes: A Dangerous Pest

Overview:

Students will read the following passage in the classroom and then answer relevant questions pertaining to the passage. Students will understand where mosquitoes rest and how to reduce mosquito infestations.

Instructions:

Read the passage either in groups or as a class.

Objectives:

Students will be able to recognize where adult mosquitoes rest.
Students will be able to recognize and identify mosquito breeding sites.
Students will be able to reduce mosquitoes around their home and school.

TEKS:

Materials:

Handouts of the reading exercise OR
Student booklets of the module OR
Overhead copy of the reading exercise
Wrap up questions for Lesson 3
Activity 4-1
Activity 4-2

Lesson 4 – Where do Mosquitoes Hide?

Question to ask before reading the passage:

Where do you think mosquitoes like to hang out?

Where would you find mosquito larvae?

Can you think of some places around the school that would have lots of mosquitoes?

Can you think of some places around your home that would have lots of mosquitoes?

Reading Passage:

By now, we know that mosquitoes lay their eggs in standing water. Did you know that a female mosquito can lay its eggs anywhere there is standing water – even a bottle cap?! We say that standing water breeds, or makes more, mosquitoes.

Adult mosquitoes enjoy spending their time resting on plants. If you have a lot of **foliage** in your yard, you will find many mosquitoes. Brushy areas, wooded areas, and yards with tall grass are all great places for adult mosquitoes to rest. Adult mosquitoes prefer to rest around your eye level and below. Tall trees with leaves above your head aren't as likely to be a resting place for mosquitoes.



You can help **reduce** mosquitoes in your yard by looking for places where water sits. Potted plants that are over watered, overturned trashcan lids, toys like wagons and buckets, bird baths, and pet water bowls are all great places in most backyards that breed mosquitoes.

Look around your home and school yard for mosquito breeding sites. Dump out standing water. If you have a dog dish or bird bath, try to replace the water every other day to keep mosquitoes from breeding.

If you do not want to be bitten by mosquitoes and avoid getting diseases that mosquitoes may transmit, reduce the places they enjoy – water and foliage! Avoid areas with lots of foliage, or you will attract mosquitoes to you.



Mosquitoes can detect people by smelling the body odor and CO₂ you emit. Some people are never bitten and others are always found by mosquitoes. Everyone's body chemistry is different and some people just attract mosquitoes better. People who use perfumes, emit more CO₂ and sweat a lot are more likely to attract mosquitoes than those who don't.



There are four things you can do to reduce your chances of getting a mosquito bite:

1. Drain standing water.
2. Staying indoors during dawn and dusk when mosquitoes are most active.
3. Dress in loose fitting long sleeves and pants.
4. Wear insect repellent.



Wrap up questions:

Where do mosquito adults rest? Areas with dense foliage

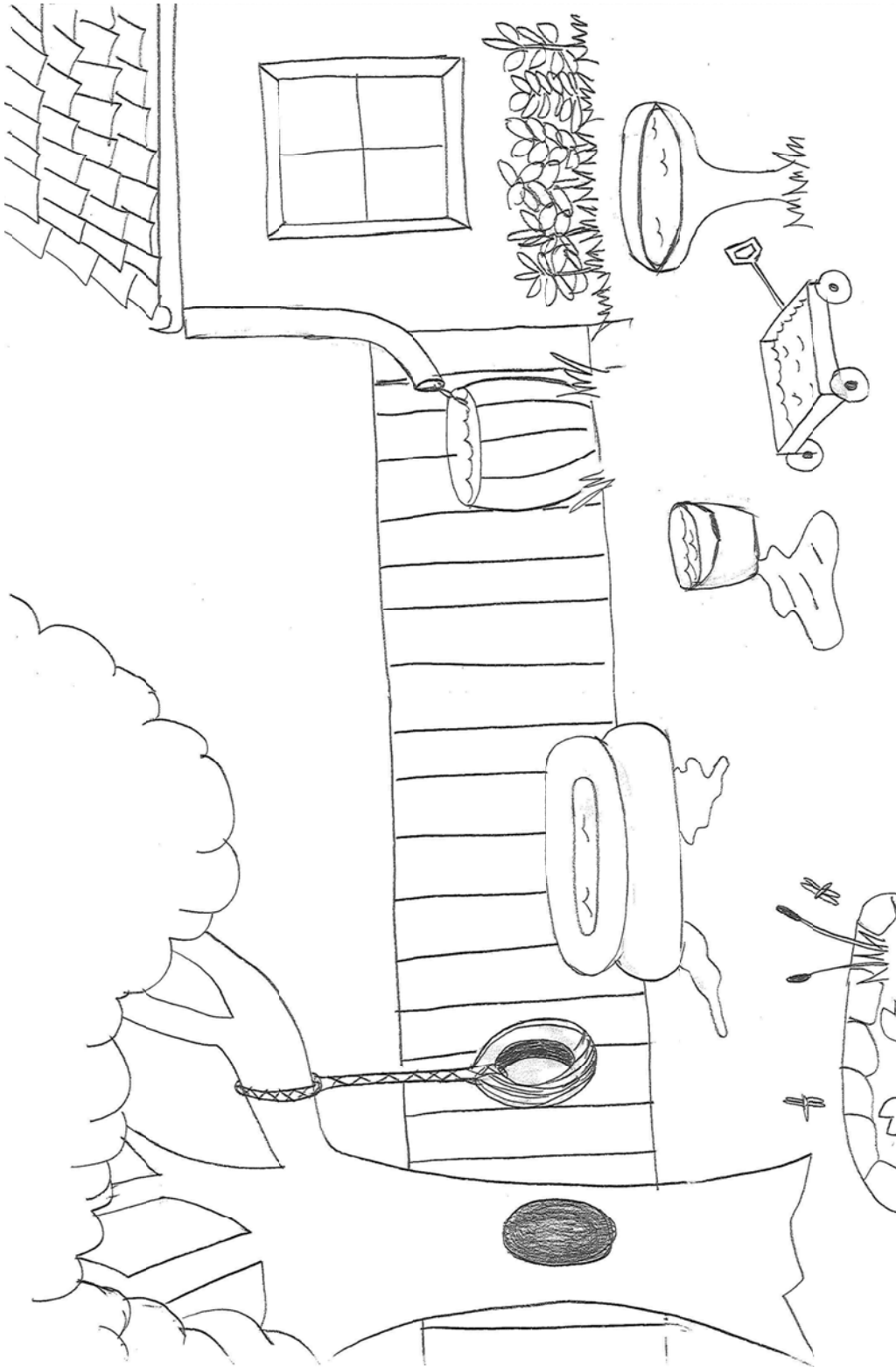
Where do mosquitoes lay their eggs? Standing water

What can you do to avoid mosquito bites? Drain standing water, stay indoors during dawn and dusk, dress in loose fitting long sleeves and pants, wear insect repellent.

What can you do around your school and home to reduce mosquitoes? Cut grass, reduce foliage, drain standing water.

Activity 4.1 Mosquito Coloring Activity

Circle the locations where mosquitoes may be laying their eggs in red. Circle the areas where adult mosquitoes rest in blue.



Activity 4.2

Visit the webpage: <http://mosquitosafari.tamu.edu>
Click on “Backyard Safari”

This interactive website takes students through a typical yard. Students can roll the cursor over areas they think may breed mosquitoes. Click on those areas to learn more about them and what you can do at home to reduce these common breeding sites.

Activity 4.3
I Spy...

After reading the passage, have students take a tour around the school yard or their homes and write down places that may harbor mosquitoes.

Adult Resting Sites

Mosquito Breeding Sites

Lesson 5 – The History of Yellow Fever in Texas

Overview:

Students will read the following passage in the classroom and then answer relevant questions pertaining to the passage. Students will learn the history of Yellow Fever and how it affected Texas residents in the 19th Century.

Instructions:

Read the passage either in groups or as a class.

Objectives:

Students will be able to understand the Yellow Fever Epidemic of 1867.

Students will be able to understand the danger of Yellow Fever.

Students will be able to understand who discovered Yellow Fever was spread by mosquitoes.

TEKS:

3.9

3.10

Materials:

Handouts of the reading exercise OR

Student booklets of the module OR

Overhead copy of the reading exercise

Wrap up questions for Lesson 5

Activity 5-1

Lesson 5– The History of Yellow Fever in Texas

Question to ask before reading the passage:

Have you heard of the disease Yellow Fever? What do you know about it?

Do we have Yellow Fever in the United States?

How do mosquitoes transmit diseases to humans?

Reading Passage:

Yellow Fever is a virus that mosquitoes transmit, or **vector**, to humans. You may not have heard much about Yellow Fever occurring in the United States, but at one time, it was a terrible disease that nearly killed entire cities!



Yellow Fever gets its name because one of the **symptoms** is that your skin and eyes turn yellow. They turn yellow because the organs in your body, such as your kidneys and liver, stop working properly.

In the 19th Century, Yellow Fever was a much feared disease and no one knew that it was spread by mosquitoes. In 1867, Texas experienced a terrible outbreak of Yellow Fever.

The Yellow Fever **Epidemic** of 1867:

In 1867, Galveston was a large town in Texas. It is a **port city**, which means that it is a town where ships load and unload goods. This was a good place to live back then, because there were many jobs and goods available. In 1867, people started dying of a mystery disease called Yellow Fever. The chance of dying from Yellow Fever was 85%. That means you were much more likely to die from the disease than to survive it.

People believed Yellow Fever was caused by **unsanitary** situations like garbage heaps and **stagnant** water and could be spread from person to person through the air. Doctors **quarantined** people who came down with Yellow Fever, but this did not stop the spread.



Houston is a city very close to Galveston. Back in 1867, Houston was smaller than Galveston. Railroads brought goods to Houston from Galveston. Mosquitoes carrying Yellow Fever would rest in cotton bales from Galveston and travel to Houston where they would infect people with Yellow Fever.

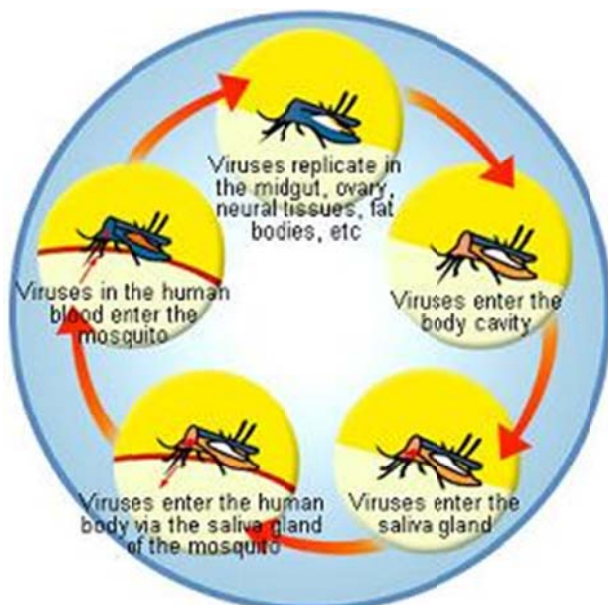
In Houston in 1867 there were only 6,000 people. 692 people were believed to have died because of Yellow Fever in only a couple months. Today, that would be like 300,000 people dying of a mystery disease in a summer!



In one town near Houston called Navasota, more than half of the town left during the epidemic. Only 1,100 people were left and it is believed that less than 20 did not get Yellow Fever.

It wasn't until 1901, when a United States Army doctor named Walter Reed found that Yellow Fever was caused by mosquitoes.

Without researchers studying mosquitoes and the diseases they transmit, outbreaks like we saw in 1867 could happen. But because we know how to manage mosquitoes, we can help save lives and stop diseases mosquitoes transmit. Luckily, we do not see epidemics of Yellow Fever today in the United States, but other parts of the world still battle this deadly disease.



Wrap up questions:

During the 19th Century, people thought stagnant water may spread Yellow Fever

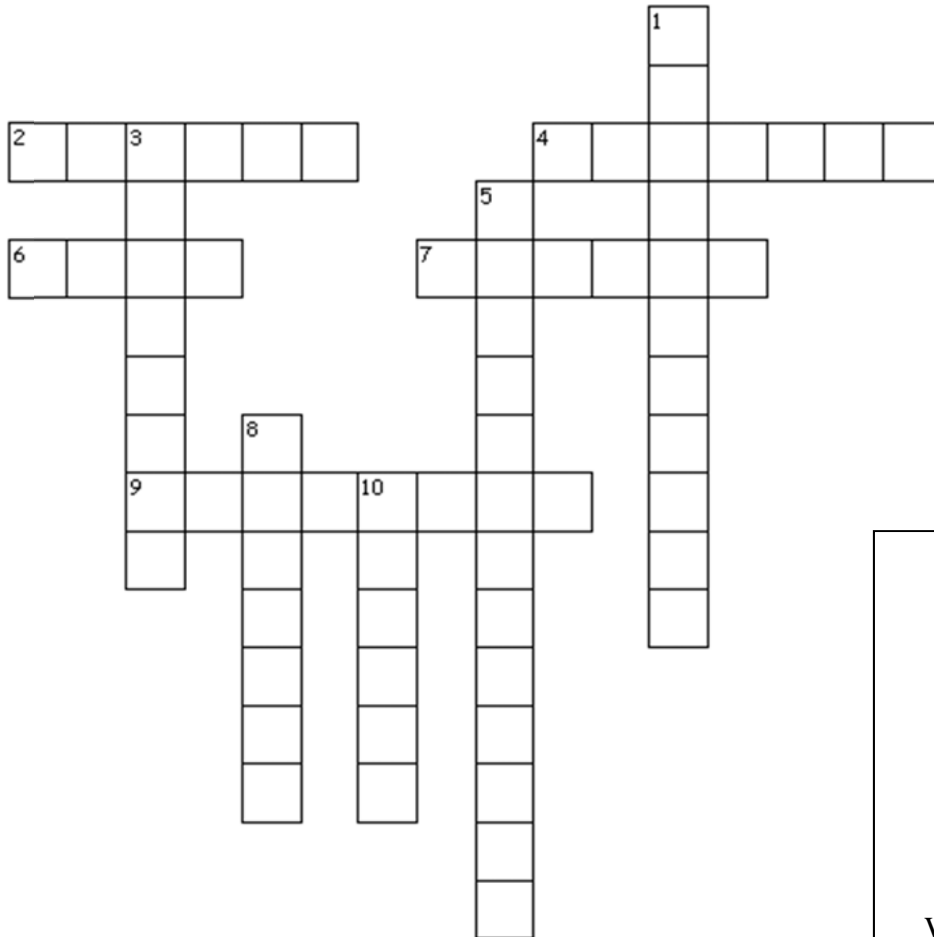
This was wrong, but they were close to the correct answer, why? Mosquitoes breed in stagnant water, so keeping stagnant water around actually increased mosquitoes and the vector to Yellow Fever. If they could have drained all the stagnant water, they probably would have stopped the epidemic.

Who solved the problem of what causes Yellow Fever? Water Reed

Where is Galveston on the map? Why do you think more outbreaks may happen here? Because they are closer to water than other inland towns. They are a port city and mosquitoes can arrive on ships or people who are already sick with diseases from other countries.

Why didn't a quarantine help stop the spread of Yellow Fever? Because it wasn't airborne or transmitted from person to person like a cold. It was transmitted by mosquitoes.

Activity 5.1 Mosquito Crossword



Word Bank

Causing
Dusk
Female
Malaria
Transmit
Mosquito
Saliva
Vector
West Nile Virus
Yellow Fever

Across

2. Only _____ mosquitoes bite humans.
4. A disease transmitted by mosquitoes that means "bad air."
6. To avoid mosquitoes, stay indoors during dawn and _____.
7. An animal that carries a disease causing organism.
9. When a mosquito gives you a disease it is known to _____ the disease.

Down

1. A disease transmitted by mosquitoes that you can get vaccinated against.
3. The deadliest animal in the world.
5. A disease transmitted by mosquitoes that is common in the United States.
8. Something that makes you sick, such as bacteria or a virus is called a disease _____ organism.
10. It is the mosquito's _____ that makes a mosquito bite itch.

Activity 5.1

Mosquito Crossword - Answers

Across

2. Only __FEMALE__ mosquitoes bite humans.
4. A disease transmitted by mosquitoes that means “bad air.” - MALARIA
6. To avoid mosquitoes, stay indoors during dawn and __DUSK__.
7. An animal that carries a disease causing organism. VECTOR
9. When a mosquito gives you a disease it is known to __CAUSING__ the disease.

Down

1. A disease transmitted by mosquitoes that you can get vaccinated against.
YELLOW FEVER
3. The deadliest animal in the world. MOSQUITO
5. A disease transmitted by mosquitoes that is common in the United States.
WEST NILE VIRUS
8. Something that makes you sick, such as bacteria or a virus is called a disease
__CAUSING__ organism.
10. It is the mosquito's __SALIVA__ that makes a mosquito bite itch.

Glossary

Antennae – structures on an insects head that help it see, smell, hear, taste and touch.

Epidemic – an outbreak of a disease

Female – girl

Foliage – plant leaves

Halteres – the hindwings on a mosquito that are modified to help them keep balance.

Male – boy

Molt – shedding the exoskeleton to allow the insect to grow

Port City – a town or city along the coast where ships load or unload goods

Proboscis – a long sucking mouthpart

Quarantine – to separate people from other people

Reduce – lessen; to make less of

Siphon – a body part on mosquito larvae that allow them to breath air. They stick the siphon above the water while their body remains below water

Stagnant – still; not moving

Symptoms – a sign of something; usually a sign that a person has a disease

Transmit – to pass something from one person to another

Trumpets - a body part on mosquito pupae that allow them to breath air. They stick the trumpet above the water while their body remains below water

Vector – an animal or thing that transmits or gives something (like a disease) from one animal to another

Unsanitary – not clean

