



Engage

Parasites and Hosts

Watch the video found at
<https://www.youtube.com/watch?v=dEWD-mZSuKk>

What do you notice?

What do you wonder?

You just witnessed a very natural interaction between two different organisms. Who benefited from the interaction - the maggot, the woman, or both?

Be ready to share your ideas.

Explore



How It Gets Spread

Materials: 3 different colors of paper cut into pieces with enough for each member of the class. Pink, blue, and green.

Information:

Your teacher is playing the part of a swarm of mosquitos in South America. You are playing the part of humans that encounter this swarm and are bitten by the mosquitos. The color you choose will determine what will happen to you from the bite.

What To Do:

1. Your teacher will allow you to pick one piece of paper.
2. Record the color here. _____

Some mosquitos in this swarm are infected with an organism that they inject into you when they bite you. Some mosquitos are not infected.

If you picked a pink paper, you did not get infected.

If you picked a blue paper, you got infected with the organism that causes malaria but were able to get treatment and lived.

If you picked a green paper, you got infected with the disease malaria, did not get treatment, and were sick off and on for many years.

3. Describe what happened to you according to what color of paper you choose in the space below.

The organism that causes malaria is spread by mosquitos. These mosquitos are found in Africa and South America. It stays in your liver and blood until you get treatment. It causes fevers, headaches, and chills.

After several weeks the organism can be spread from you to other mosquitos that bite you. It never goes away unless you get treatment.

Explain

PARASITES AND HOSTS

PARSITE

HOST

SYMPTOMS

TRANSMISSION

Elaborate

Where Did They Get It?

What To Do:

1. Read the Parasite Mysteries and determine which of the Clue Cards goes with each mystery.
2. Cut them out and glue them in the question boxes below each mystery.
3. Use the parasite I.D. cards to determine which of the parasites is described in the mystery and glue it in by folding it on the middle line and gluing just the bottom side.

1. Ryan and Daniel went on a camping trip with their family. They discovered while eating lunch they have forgotten to bring something to drink. They decided to drink the water out of the trout stream. Several weeks later Daniel began complaining of severe stomachaches and diarrhea. They went to the doctor and were told they both had parasites in their poop.

Who got sick?
(Who is the host?)

What symptoms did the host have?

Where did the story take place?

How did the person get the parasite and become sick?

Parasite Card

2. Kelly's parents took her to San Francisco for her birthday. After a full day of shopping, they went to a sushi restaurant. All of her family ordered cooked fish, but Kelly decided to try the sushi. The next evening Kelly got a terrible stomachache and started vomiting. The doctor diagnosed Kelly with a parasite infection.

Who got sick?
(Who is the host?)

What symptoms did the host have?

Where did the story take place?

How did the person get the parasite and become sick?

Parasite Card



3. Eric and his father were on a Mediterranean cruise when they decided to add an overland hiking trip. They slept in a sandy area in sleeping bags under the stars – no tent. That night Eric awoke to the sound of a fly buzzing around his head and felt a stinging sensation around his mouth. When they returned home, he noticed a big sore around his mouth. His parents took him to the doctor and found he had a parasitic infection.

Who got sick?
(Who is the host?)











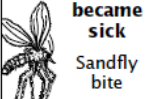
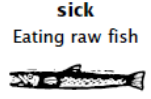

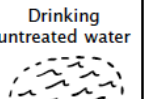

What symptoms did the host have?

Where did the story take place?

How did the person get the parasite and become sick?

Parasite Card

Clue Cards

Symptoms Recurring fever and chills	Symptoms Red swelling rash, joint pain, headache, fever	Symptoms Severe stomach ache, vomiting	Symptoms Open sore on skin	Symptoms Diarrhea and severe stomach ache
Location Northeastern United States 	Location The Mediterranean Sea 	Location Sushi restaurant, San Francisco, California 	Location The Nile River, Egypt 	Location The Black Hills of South Dakota 
Host Kelly 	Host Becky 	Host Daniel and Ryan 	Host Sara 	Host Eric 
How host became sick Sandfly bite 	How host became sick Eating raw fish 	How host became sick Tick bite 	How host became sick Drinking untreated water 	How host became sick Mosquito bite 

4. Sara and her family traveled to Egypt during summer vacation. They took a boat trip down the Nile River. One night they slept out on the deck of the boat. When they woke up, they found they had many insect bites. Sara became ill with fever and chills. Then they went away. A few days later Sara became ill again.

Who got sick?
(Who is the host?)







What symptoms did the host have?

Where did the story take place?

How did the person get the parasite and become sick?

Parasite Card

Parasite I.D. Cards

		
Parasite Sandfly A small blood-sucking fly that transmits Leishmania	Parasite Liver Fluke Usually infects sheep, cattle, and rabbits	Parasite Anopheles mosquito Transmits Malaria
		
Parasite Black-legged tick Transmits Lyme Disease	Parasite Anisakis (an-eh-sa-kiss) Called the whale or sushi worm	Parasite Giardia (gee-r-dea) A tiny protozoa that lives in streams



Evaluate



Name _____

period _____

Parasites and Hosts

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

Transmission

Symptoms

Bot Fly

maggot

Parasite

diarrhea

Malaria

Mosquito

vomiting

sushi

Host

food

EXIT TICKET

Parasites and Hosts

1. In the relationship called parasitism which of the organisms benefits?

A. Parasite

B. Host

2. In the relationship called parasitism which of the organisms is harmed?

A. Parasite

B. Host

3. How do most parasites use the host?

A. As a playground

B. Has a source for food

D. As a landing spot

4. What are the signs of an illness called?

A. transmission

B. symptoms

5. What is the process where a parasite moves from one host to another called?

A. symptoms

B. transmission