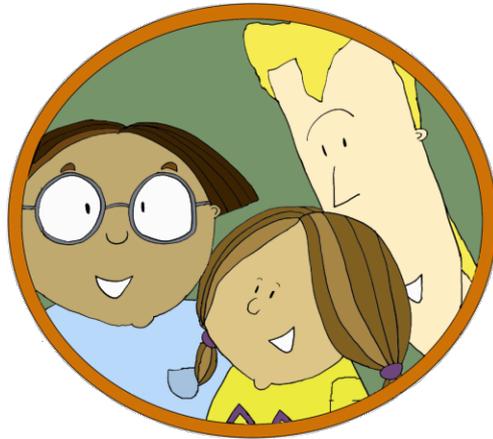


# *The Disease Detectives*



**VS**



**ASIAN TIGER MOSQUITO**

# DISEASE DETECTIVES VS ASIAN TIGER MOSQUITO

IT IS A WARM SUMMER'S DAY. THE THREE FRIENDS -LUCY, MICHAEL AND THOMAS- ARE HAVING A PICNIC AT THE ALLOTMENT OF LUCY'S PARENTS.



I HEARD YOU NEED REALLY GOOD MOSQUITO REPELLENT IF YOU WANT TO HIKE IN SWEDEN.

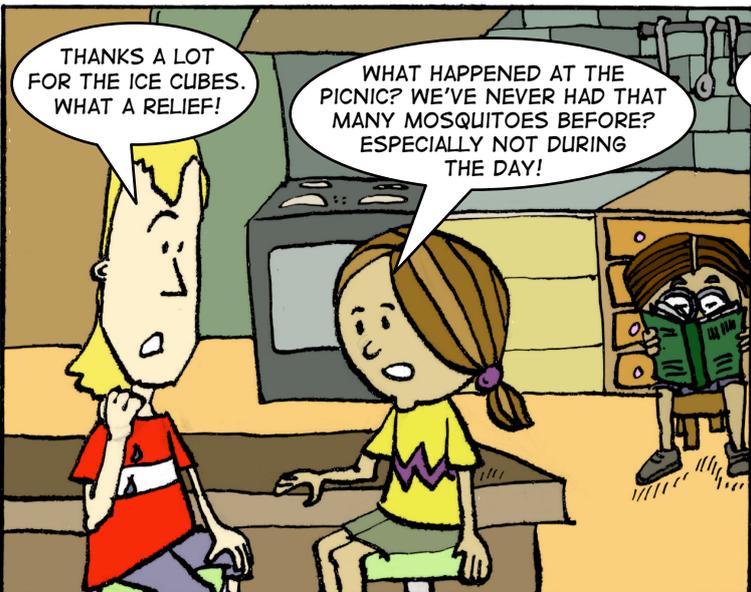
HOWEVER, THEIR PICNIC HAD UNINVITED GUESTS.



...target detected at 133.911  
...thermal scan: warm blooded  
...sweat composition: human  
...initiate attack sequence



OUCH!

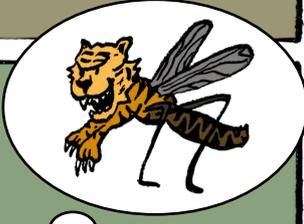


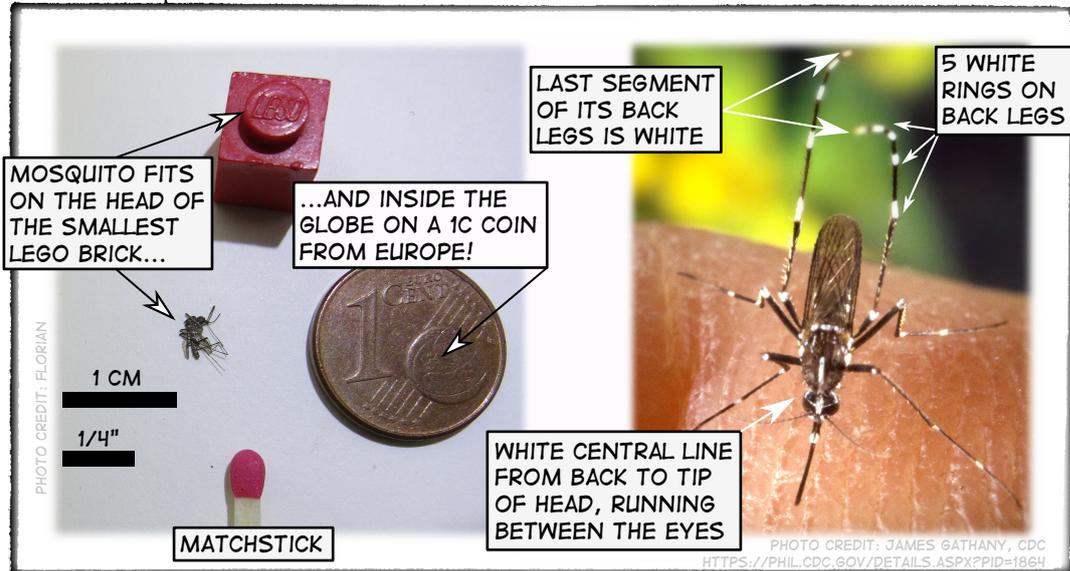
THANKS A LOT FOR THE ICE CUBES. WHAT A RELIEF!

WHAT HAPPENED AT THE PICNIC? WE'VE NEVER HAD THAT MANY MOSQUITOES BEFORE? ESPECIALLY NOT DURING THE DAY!

I LOOKED THEM UP IN MY INSECT BOOK! OUR ATTACKERS WERE...

ASIAN TIGER MOSQUITOES

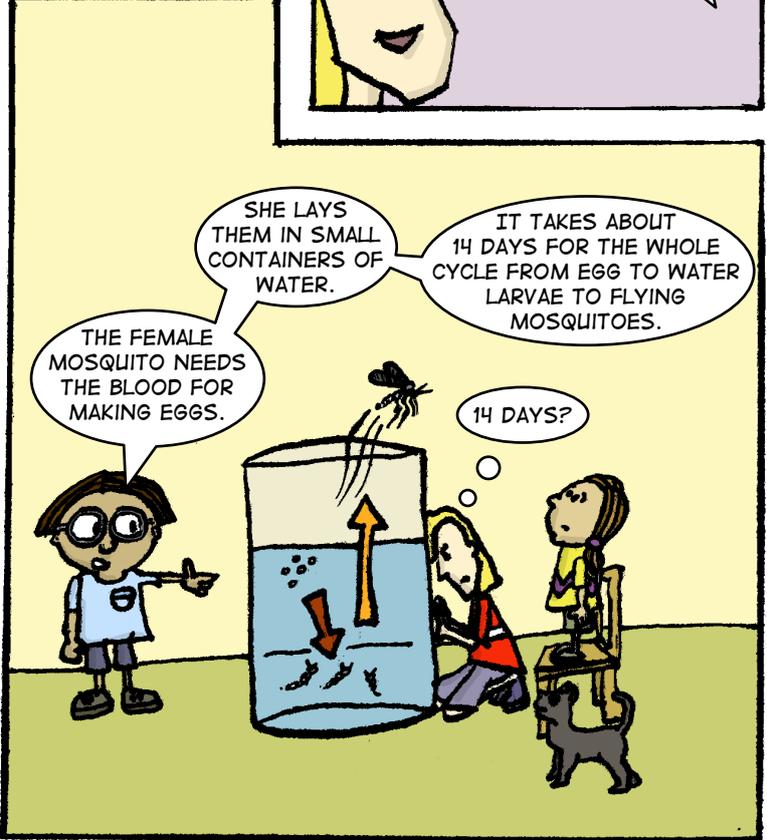
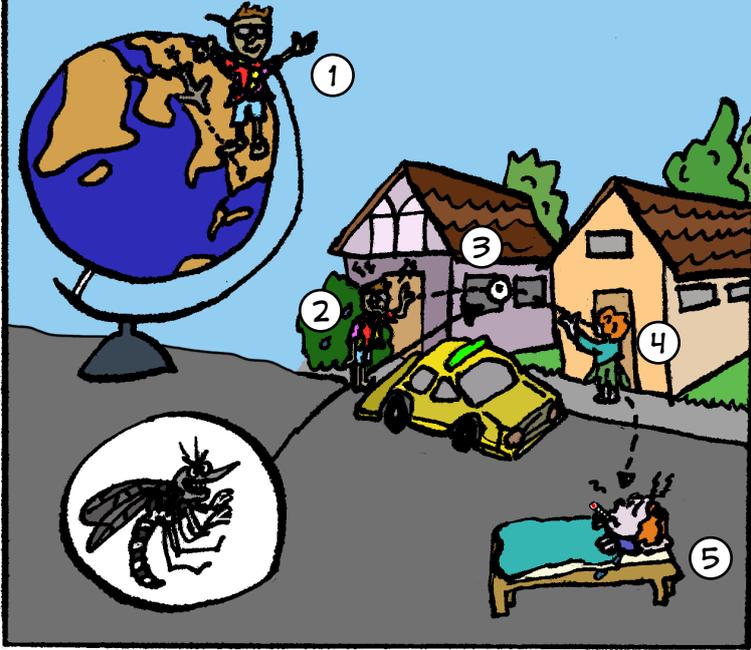




THE TIGER MOSQUITO CAN TRANSMIT A LOT OF DANGEROUS DISEASES LIKE DENGUE, ZIKA OR CHIKUNGUNYA.

DON'T WORRY, THOMAS. YOU CAN ONLY GET SICK IF THE MOSQUITO HAS PREVIOUSLY BITTEN AN INFECTED PERSON.

THE PROBLEM STARTS IF:  
 (1) A TOURIST GETS INFECTED ABROAD  
 (2) RETURNS HOME WITH THE DISEASE  
 (3) GETS BITTEN **HERE** BY AN ASIAN TIGER MOSQUITO  
 (4) WHICH **AFTERWARDS** BITES A LOCAL FROM HERE  
 (5) WHO **THEN** FALLS SICK

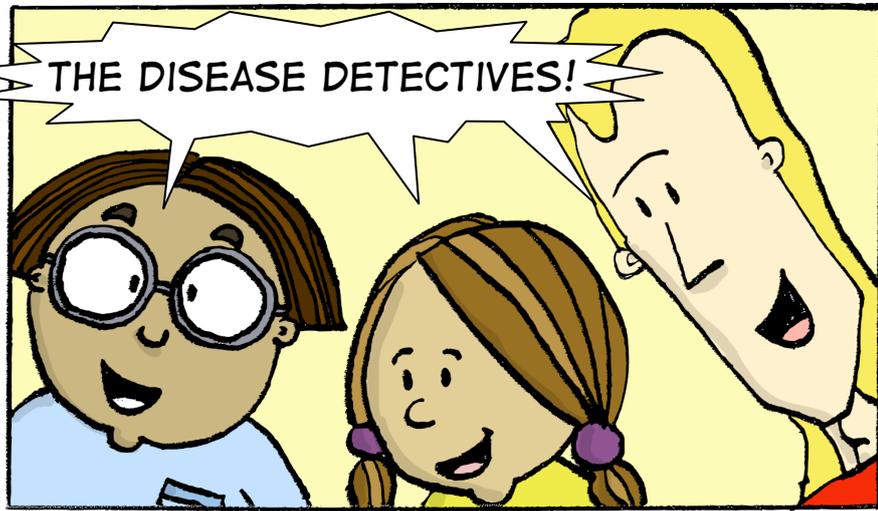




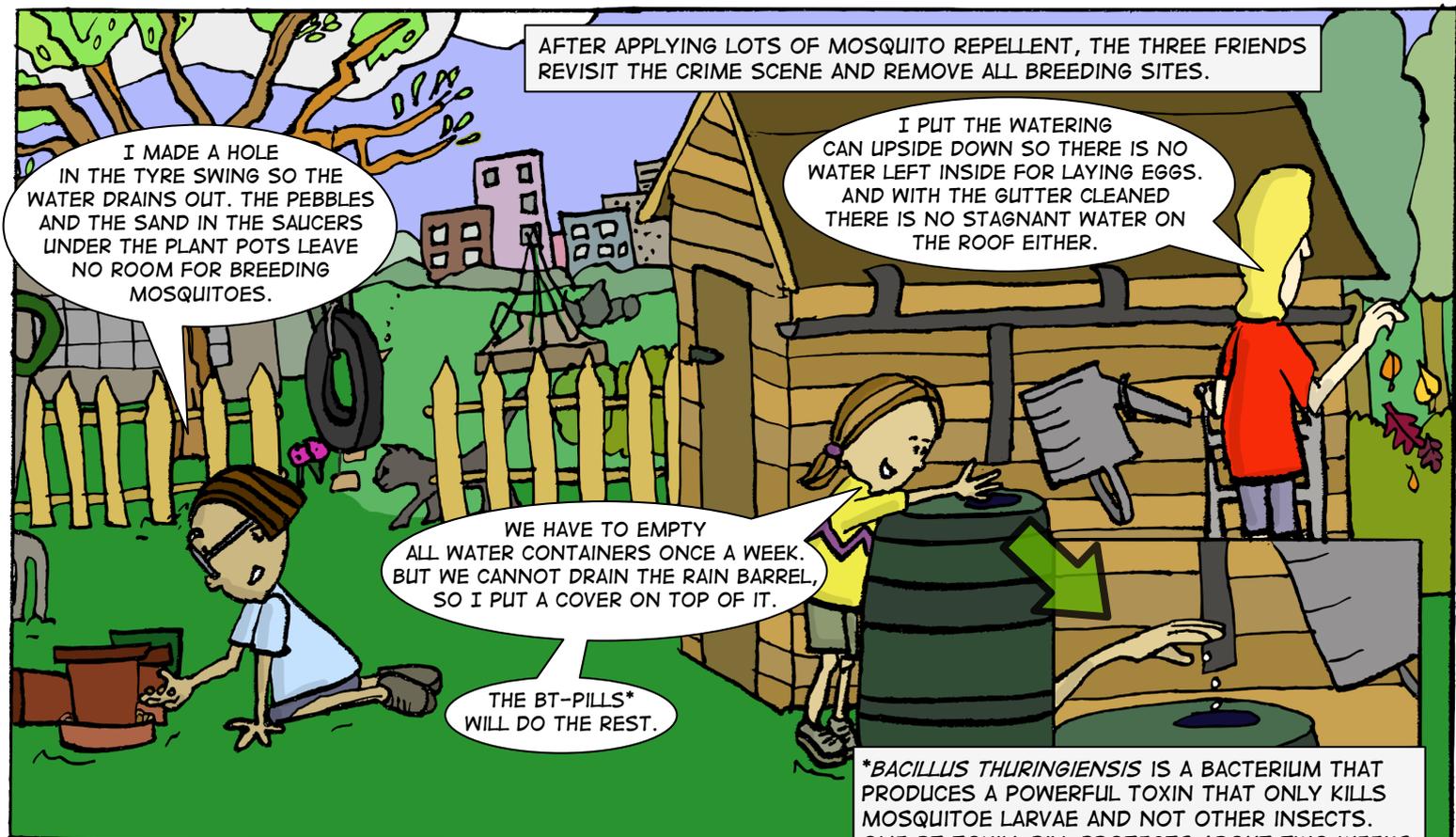
NO WAY!  
THE MOSQUITOES  
NEED A NEW BREEDING  
PLACE!

OH NO!  
WE NEED A NEW  
PICNIC SITE.

BUT WHO  
WILL DRIVE THEM  
OFF?



THE DISEASE DETECTIVES!



AFTER APPLYING LOTS OF MOSQUITO REPELLENT, THE THREE FRIENDS REVISIT THE CRIME SCENE AND REMOVE ALL BREEDING SITES.

I MADE A HOLE  
IN THE TYRE SWING SO THE  
WATER DRAINS OUT. THE PEBBLES  
AND THE SAND IN THE SAUCERS  
UNDER THE PLANT POTS LEAVE  
NO ROOM FOR BREEDING  
MOSQUITOES.

I PUT THE WATERING  
CAN UPSIDE DOWN SO THERE IS NO  
WATER LEFT INSIDE FOR LAYING EGGS.  
AND WITH THE GUTTER CLEANED  
THERE IS NO STAGNANT WATER ON  
THE ROOF EITHER.

WE HAVE TO EMPTY  
ALL WATER CONTAINERS ONCE A WEEK.  
BUT WE CANNOT DRAIN THE RAIN BARREL,  
SO I PUT A COVER ON TOP OF IT.

THE BT-PILLS\*  
WILL DO THE REST.

\*BACILLUS THURINGIENSIS IS A BACTERIUM THAT  
PRODUCES A POWERFUL TOXIN THAT ONLY KILLS  
MOSQUITO LARVAE AND NOT OTHER INSECTS.  
ONE BT TOXIN-PILL PROTECTS ABOUT TWO WEEKS.



PHEW, WE  
DID IT!

NO, THIS WAS JUST  
THE BEGINNING.

THOMAS IS RIGHT.  
WE NEED TO REMOVE ALL  
BREEDING SITES IN THE  
NEIGHBOURHOOD.

BUT WE CANNOT  
DO THIS ALONE.



AND SO THE DISEASE DETECTIVES GATHER  
A HUGE MOSQUITO INTERVENTION TEAM.

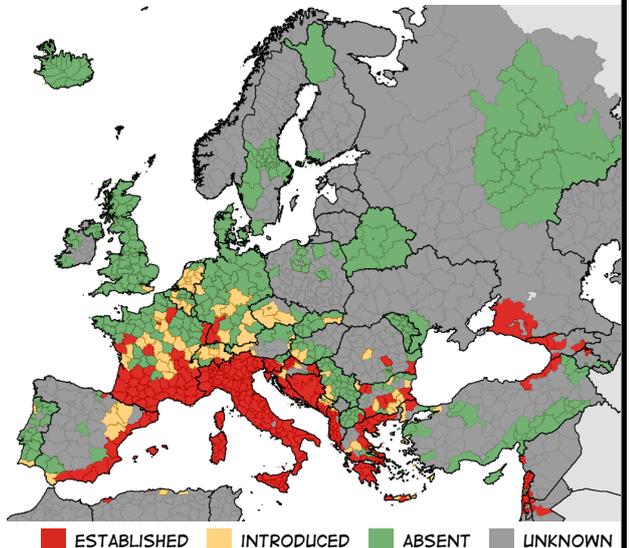


THE ASIAN TIGER MOSQUITO (*Aedes albopictus*) USED TO LIVE IN THE TROPICAL REGIONS OF THE WORLD. IT WAS TRANSPORTED TO TEMPERATE REGIONS LIKE NORTH AMERICA AND EUROPE IN OLD TYRES THAT WERE CARRIED BY CARGO SHIPS. WITH LITTLE WATER PUDDLES INSIDE AND THE WARM SUN SHINING ON THEM DURING THE LONG JOURNEY, THE BLACK TYRES WERE THE BEST BREEDING PLACES EVER!

AFTER ARRIVAL, THE MOSQUITOES QUICKLY FOUND NEW PLACES TO BREED AND BITE, LIKE LUCY, THOMAS AND MICHAEL'S ALLOTMENT. THE MOSQUITOES ALONE JUST BITE AND CANNOT INFECT ANYONE AS LONG AS EVERYBODY AROUND THEM IS HEALTHY. BUT THE MOMENT THEY BITE SOMEONE INFECTED WITH DENGUE OR ZIKA VIRUS, THEY CAN THEN TRANSMIT THAT VIRUS TO EVERYONE THEY BITE AFTERWARDS. BECAUSE OF THAT, THEY ARE CALLED "DISEASE VECTORS".

AND THIS IS ALSO WHY YOU HAVE TO PREVENT MOSQUITO BREEDING SITES IN THE FIRST PLACE. IT BECOMES EVEN MORE IMPORTANT IF THERE ARE ALREADY ESTABLISHED COLONIES IN YOUR REGION. PREVENTION IS EASY: JUST MAKE SURE THE 14 DAY BREEDING-CYCLE GETS INTERRUPTED BY CHANGING WATER OR DROPPING BT-PILLS.

AND DON'T FORGET TO BRING YOUR FRIENDS!



*Aedes albopictus* DISTRIBUTION. ECDC, STOCKHOLM 2019, [HTTPS://ECDC.EUROPA.EU/EN/DISEASE-VECTORS/SURVEILLANCE-AND-DISEASE-DATA/MOSQUITO-MAPS](https://ecdc.europa.eu/en/disease-vectors/surveillance-and-disease-data/mosquito-maps)

# DISEASE DETECTIVES MOSQUITO QUIZ

1. WHY DO YOU HAVE TO EMPTY WATER CONTAINERS IN YOUR GARDEN AT LEAST ONCE IN A WEEK?

A: IF YOU DON'T, THEY OVERFLOW.

B: ASIAN TIGER MOSQUITOES NEED TWO WEEKS TO HATCH AND THIS STOPS THEIR DEVELOPMENT.

C: THE POSTMAN COULD TRIP OVER THE CONTAINER AND GET WET SHOES.

2. HOW BIG IS THE ASIAN TIGER MOSQUITO?

A: LIKE A BABY TIGER

B: LIKE A BEE

C: IT FITS INTO THE GLOBE OF THE EUROPEAN 1C COIN

3. WHY SHOULD WE PREVENT THE TIGER MOSQUITO FROM BREEDING HERE?

A: IT CAN TRANSMIT DANGEROUS DISEASES LIKE DENGUE OR CHIKUNGUNYA

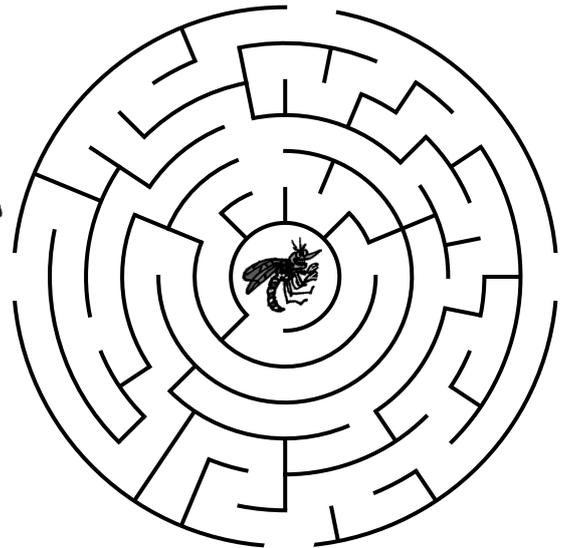
B: IT BITES A LOT

C: BIRDS GET SICK WHEN THEY EAT THEM

FIND THE BREEDING GROUNDS!



CAN YOU LEAD THE MOSQUITO TO ITS BREEDING GROUNDS?

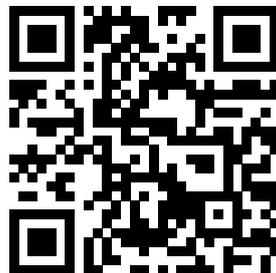
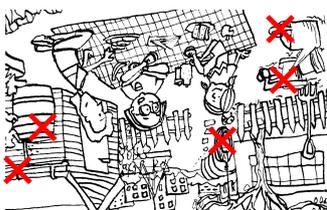


HTTP://WWW.MAZEGENERATOR.NET/

CAN YOU FIND THE MATCHING MOSQUITO TIGER?



MOSQUITOES: BOTTOM RIGHT  
BUCKET  
MAZE: FLOWER VASE AND  
ANIMERS: IB, SC, ZA



HTTP://WWW.DISEASE-DETECTIVES.ORG/MOSQUITO-CARTOON.HTML

COLOUR ME!

