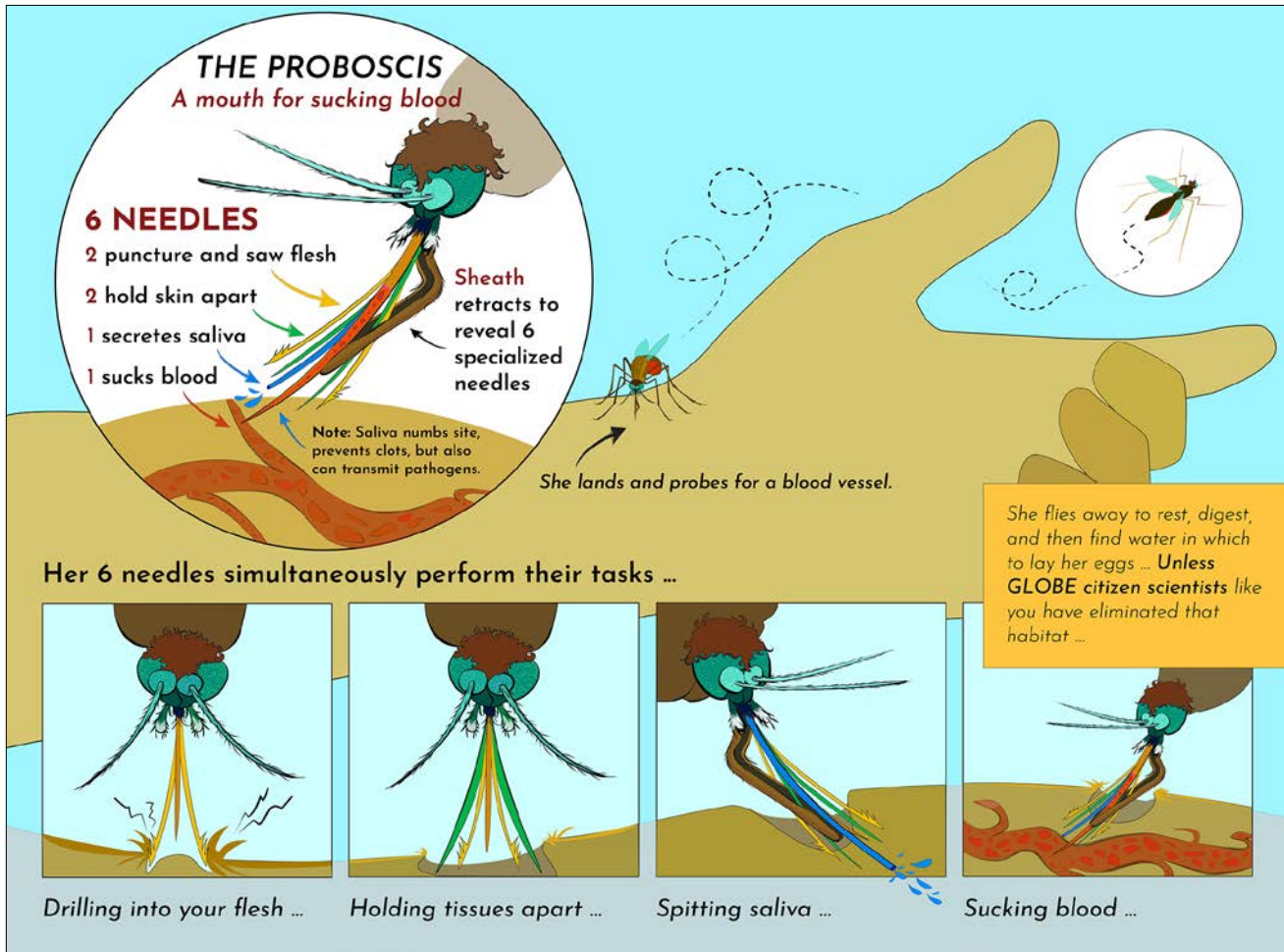


# Mosquito Proboscis: Mechanics of a Bite



## VOCABULARY ALERT

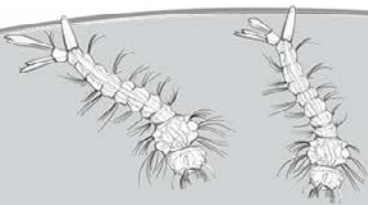
**Proboscis** (*pronounced pro-bah-sis or pro-bahs-kis*): In insects, the proboscis is the elongated tube-shaped mouthpart used to gather food. The female mosquito also uses the proboscis to gather blood from humans and other mammals, as well as birds, reptiles, and amphibians.

**Breaking down the word:** “pro” means “forward” (from the head of an animal); “boscis” means “to feed.”

## LEARN MORE

**Watch** “How Mosquitoes Use Six Needles to Suck Your Blood,” a video about the structure and function of the proboscis and gain a scientific appreciation for just how amazing it is: <https://www.pbs.org/video/deep-look-mosquitoes/>.

What was the most interesting thing that you learned from this video?



Based on the graphic video and the video:

I wonder ...

What if ...

Is it possible that ...

This reminds me of ...

## ODE TO THE PROBOSCIS

**M**osquitoes have a mouth  
since after all, they need to eat.  
But the mouth of every female  
poses risks to all she meets.

**I**n her mouth are found six needles.  
Wait... **SIX NEEDLES??** You may scream!  
Why does she need six needles?  
Six needles seems extreme!

**F**irst, two will hold your skin apart,  
two sharper ones will saw,  
they're headed for a blood vein-  
it's your blood she wants to draw.

**S**he is such a caring mother.  
She's not trying to be mean.  
But her eggs cannot develop  
without using blood protein.

**S**o, needle five sucks up your blood,  
to her abdomen it goes.  
You will hardly know it's happening  
'cause mosquitoes are such pros.

**T**he sixth one spits saliva  
that contains a lot of stuff.  
Some contents numb the area,  
others make blood clotting tough.

**T**he tiny loss of blood  
is not at all the greatest threat.  
It's the many bad diseases  
That a human just might get.

**A**long with her saliva-  
every now and every then-  
she may also leave behind  
a dangerous pathogen.

**A** human could be the receiver  
of the virus for yellow fever.

**O**thers, meanwhile,  
could get West Nile.

**A**dd to the hysteria  
the chance of getting malaria.

**T**he diseases are a problem  
that **YOU** can help reduce.  
Find the places where she lays her eggs  
And turn that water loose.

**B**ut how cool is a proboscis?  
Pretty cool, you must admit.  
Mosquitoes are the only ones  
who simultaneously suck and spit.

## NOW IT'S YOUR TURN

**What is your mosquito poem, story, song, or cartoon?** Include any or all of the characteristics that you've learned about mosquitoes:

- **four life cycle stages:** (egg, larva, pupa, adult)
- **habitat for egg/larva/pupa:** standing water
- **anatomy of larva:** siphon
- **anatomy of adult:** two wings, six legs, head, thorax, abdomen, proboscis
- **feeding:** eating plant nectar
- **biting:** obtaining a blood meal

