



Name _____

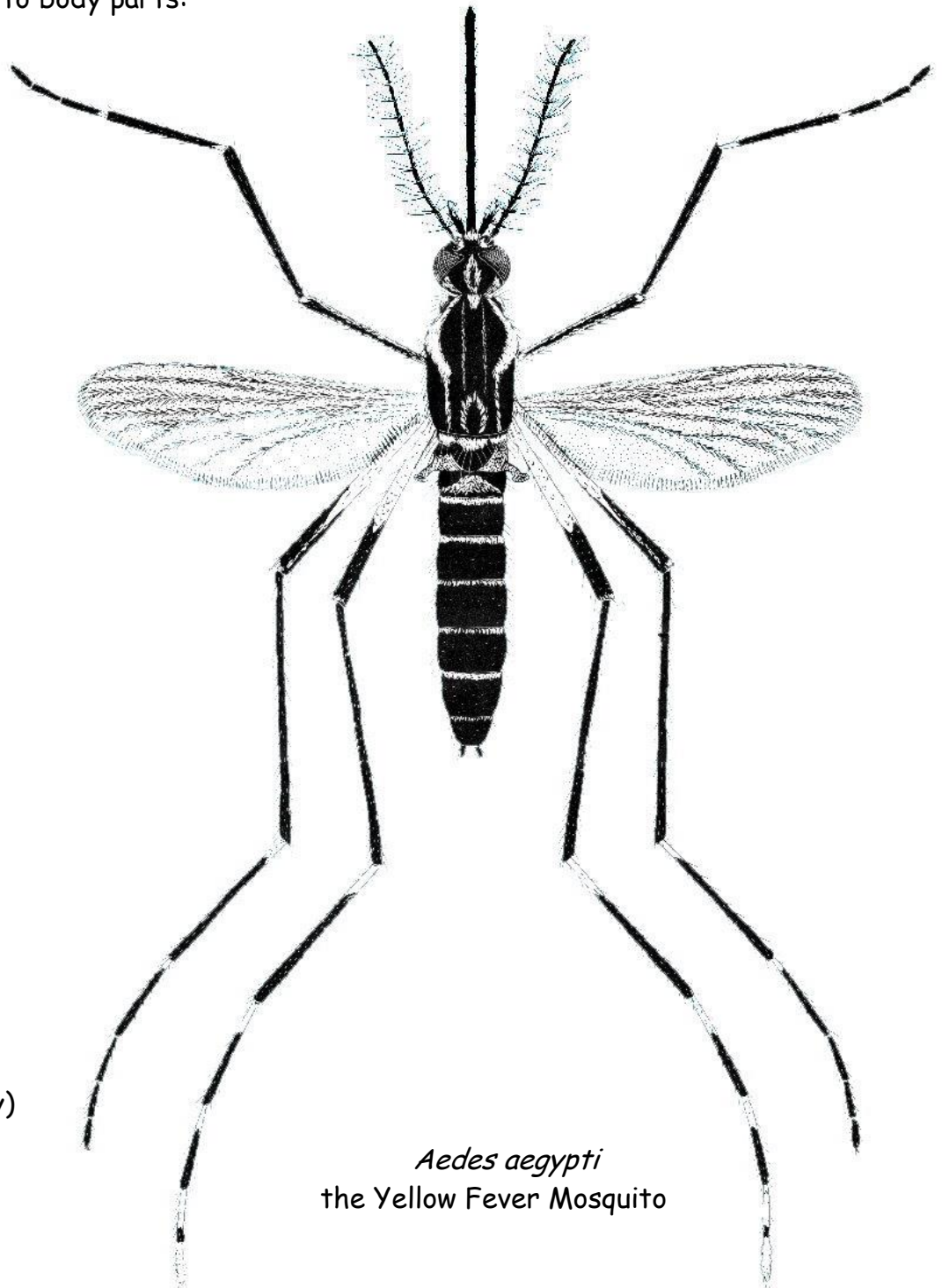
Period _____

Date _____

Mosquito Anatomy

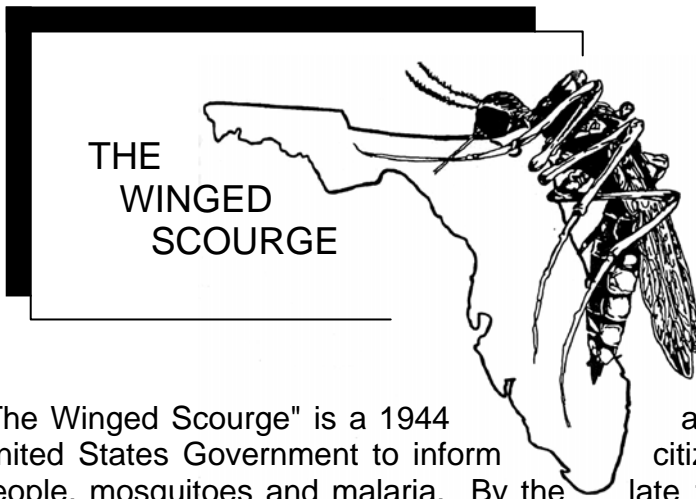
Label the following mosquito body parts:

- (a) head
- (b) eyes
- (c) palpi
- (d) antennae
- (e) proboscis
- (f) stylets
- (g) thorax
- (h) legs
- (i) wings
- (j) halteres
- (k) abdomen
- (l) cerci
- (m) claspers (males only)



Aedes aegypti
the Yellow Fever Mosquito





Name _____

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"The Winged Scourge" is a 1944 animated film. It was created for the United States Government to inform citizens about the association between people, mosquitoes and malaria. By the late 1940s and early 1950s, malaria had been almost eradicated in this country. Knowing what you now know about mosquitoes, evaluate the film in terms of scientific content, methods of mosquito control and environmental impact.

1. List any negative words used in the film to describe the mosquito. _____

2. What kind of mosquito carries malaria?
(a) *Culex* (b) *Aedes* (c) *Anopheles* (d) *Psorophora*
3. Where does the female mosquito obtain the malarial parasite?
(a) from her parents (b) from a person sick with malaria
(c) from other mosquitoes (d) from the water
4. How does the mosquito vector, or transmit, the disease to her victim?
(a) by sucking the victim's blood (b) by touching the victim with her palpi
(c) by spitting saliva into the blood (d) by touching the victim with her antennae
5. How can you tell an *Anopheles* mosquito from other mosquitoes?
(a) its larvae have trumpets (b) it stands on its head when biting
(c) it is larger than other mosquitoes (d) there is no way to tell
6. After feeding, how long does it take for the mosquito to digest the blood? _____

7. Does the film imply that most people who get sick from malaria die? yes no
8. How far from their breeding site do *Anopheles* mosquitoes fly as adults? _____

Control

List two methods of control mentioned in the film for each of the categories below.

Chemical

Mechanical

Biological

Place an asterisk (*) next to each method you feel is environmentally safe. Be prepared to discuss.

The Disney Corporation has just been commissioned to create a modern film on mosquitoes and their relationship to people. You have been asked to serve as a technical consultant to the production of this new film. How will your film differ from the film you just watched? What new scenes will you add? What old scenes will you include in the new film? What will be the most important message you want viewers to understand after watching your film?

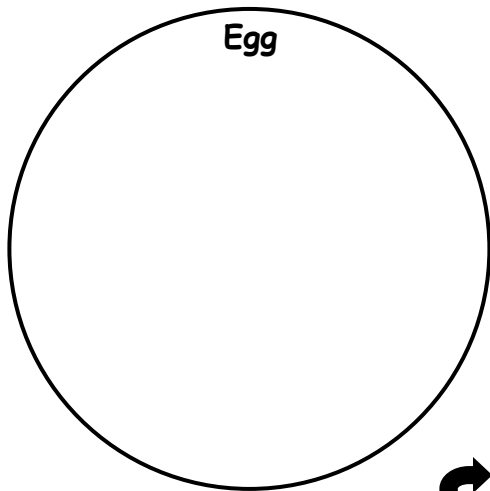
Mosquito Life Cycle

Name _____

Period _____

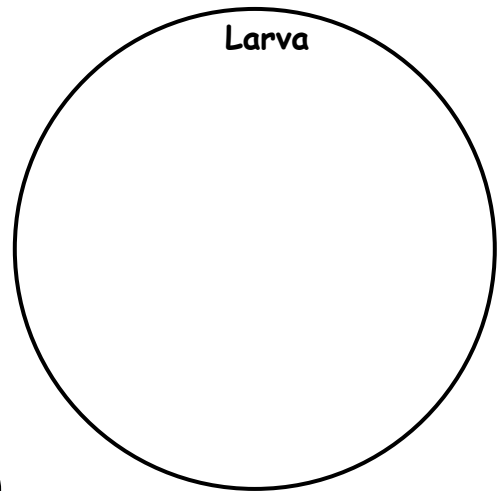
Date _____

During this lab, you will have the opportunity to use a microscope to view and sketch mosquitoes: eggs, larva, pupa, and adults. Keep the microscope on its lowest power while using these prepared microscope slides. Do not use the stage clips. You will need to constantly adjust the focus of your microscope.



How many eggs do you see?

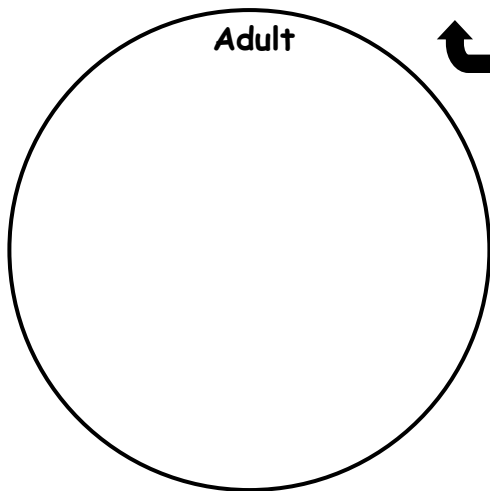
How many times is the microscope magnifying the eggs?



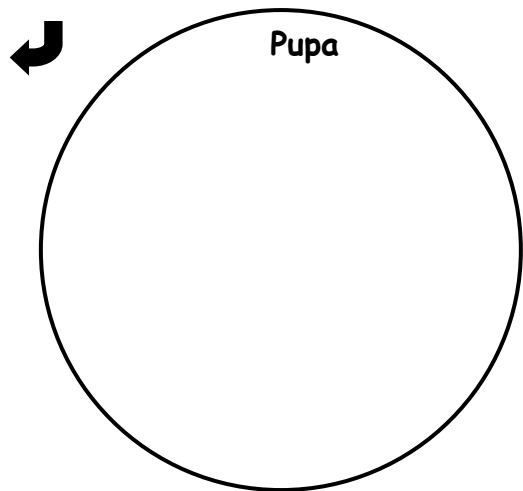
Can you see the entire larva in your field of vision?
yes no

The siphon, or breathing tube is at the end of the larva's

(a) Head (b) Thorax (c). Abdomen



Sketch one of the two mosquitoes.
Did you sketch a male or a female?



Can you see a developing adult mosquito inside the pupa?

yes no

Skeeter Heads

Name _____

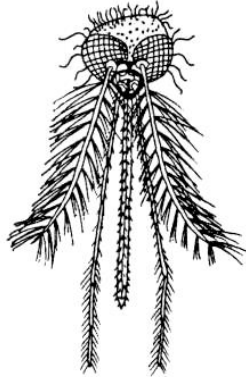
Period _____

Date _____

Just look at the heads of the adults. Check each structure after observing it through the microscope.

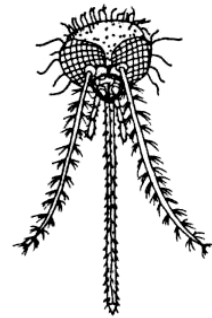
Male

- () eyes
- () antennae
- () palpi
- () proboscis
- () stylets



Female

- () eyes
- () antennae
- () palpi
- () proboscis
- () stylets



The antennae of the male and female mosquito are different in appearance. What other structure on the head differs from the male to the female?

- (a) eyes (b) palpi (c) proboscis (d) stylets

How does this structure differ from male to female? _____

Skeeter Adults

Now look at the entire adult. Check each structure after observing it through the microscope.

Male

- () head
- () thorax
- () abdomen
- () halteres
- () claspers



Female

- () head
- () thorax
- () abdomen
- () halteres
- () cerci



How many segments does each leg have? _____ How many segments does the abdomen have? _____

Is there anything inside either mosquito's abdomen? yes no

If yes, what might it be? _____

Inside the mosquito's thorax is muscle tissue that looks like strings.

The muscle tissue works the mosquito's _____ and _____

Facts from the presentation on insects:

Facts on the presentation on mosquitoes: