Mosquito YOLO  
Life Cycle and Observations Lab

**Directions:** at your lab table, complete each of the following activities using the materials provided.

**Part 1:** Prepare your dissecting microscope. Then place enough distilled water in the jar to cover ONLY the bottom. Submerge the piece of paper with mosquito eggs under water, note the time, and place the jar under the dissecting microscope. Describe what you see as the larvae emerge from the eggs. How long does this process take?

**Part 2:** Observe the larvae in the glass jar provided. These larvae hatched from eggs at different times. Draw and make observations about the differences and similarities between the larval stages.

**Part 3:** When you are ready, open the Petri slide and use a pipette to carefully remove one of the larvae from the jar and place the organism on the Petri slide. NOTE: you only want to have 1-2 drops of water plus the larvae on the Petri slide for the best observations under the dissecting microscope. Ask your teacher to provide you with bits of charcoal. The larvae will feed on tiny bits of charcoal. What structure does this allow you to see more clearly? Why is this structure important to function?

**Part 4:** Using the dissecting microscope, view these larvae. Observe and label the following structures below: mouth brush, head, thorax, abdomen, siphon (air tube). What are the functions of these structures?

- **Mouth Brush:**
- **Head:**
- **Thorax:**
- **Abdomen:**
- **Siphon:**
Part 5: Mosquito Larvae Diving Experiment

PREDICTION: How long do you think the larva will stay under water?

PREDICTION: How deep do you think that the larva will dive?

1. Measure 50 mL of distilled water in a graduated cylinder.  
2. Capture a larva with a plastic pipette.  
3. Drop the larva in the cylinder of water.  
4. Record the time when the larva starts to descend.  
5. Stop the time when the larva returns to the top.

Why do you think larva hang at the top of the water column?

Why do you think the larva dive under the water?

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Part 6: Look at the diagram of the Mosquito Life Cycle above. List 3 places where the life cycle could be disrupted and what could disrupt the cycle there.

1. ______________________________________________________________________________ 
   ______________________________________________________________________________ 
2. ______________________________________________________________________________ 
   ______________________________________________________________________________ 
3. ______________________________________________________________________________ 
   ______________________________________________________________________________ 

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