

Name:

Date:

Class:

## Claim Evidence Reasoning Worksheet **Answer Key**

**Driving Question:** What is the relationship between flooding and the abundance of mosquito breeding habitats?

**Claim:**

Flooding increases the abundance of mosquito breeding habitats.

**Evidence:**

Reference the images you've captured during the activity to support your claim.

After flooding our stream table, you can see that there's an increase in soil moisture and there are areas outside of our modeled river that become filled with stagnant water over time. These moist and stagnant areas are ideal mosquito breeding habitats.

**Reasoning:**

Use the following terms in your answer: discharge, oxbow lake, ecosystem, mosquito larva.

Increasing the river discharge amounts flooded our stream table and caused the water to move faster. As the velocity of the river increased, erosion occurred in the river and caused the formation of oxbow lakes, which is when a curve of the river gets sectioned off and changes pathways, forming a curved lake that used to be part of the river. This lake ecosystem is now an ideal area for mosquitoes to breed, because mosquito eggs and larva require stagnant bodies of water to survive. The flood also increased the moisture of the soil in the area surrounding the river, and if any small puddles of stagnant water are left behind, these areas will also serve as ideal locations for mosquitoes to lay their eggs.