






Name: _____

Date: _____

Table 4-2: Summarizing Our Findings

Possible Cause	Example	Description	Evidence
1. There was a decrease in the number of plants or algae.		The algae in the vernal pool doesn't grow as much so there is less algae in the pool.	<hr/> <hr/> <hr/>
2. There was a decrease in the number of prey.		The fairy shrimp that the tiger salamander eat are no longer living in the vernal pool.	<hr/> <hr/> <hr/>
3. There was a decrease in water quality.		Farmers use substances to grow crops. When it rains, substances, such as pesticides, flow into the vernal pool.	<hr/> <hr/> <hr/>

<p>4. There was an increase in human activity.</p>		<p>A new housing development is under construction near the vernal pool.</p>	<hr/> <hr/> <hr/>
<p>5. There was an increase in the number of predators.</p>		<p>There are unpredictably large numbers of garter snakes near the vernal pool and they eat every salamander they can find.</p>	<hr/> <hr/> <hr/>

Lesson 4-2: SELF AND PEER CHECK! Arguing From Evidence to Eliminate a Cause

Discuss the following questions with your group and come up with an argument for eliminating one of the causes.

1. What is your group's claim? In other words, which cause does your group recommend eliminating?
2. What is your evidence for eliminating this cause?
3. What is your reasoning?

As a group, read each question and answer "Yes" or "No" based on your group's argument for eliminating a cause. Then, if you answered "No" to any question, improve your argument before presenting to the class.

Argument	
Does our argument include a claim, evidence, and reasoning?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Claim	
Does our claim identify which cause we recommend eliminating?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Evidence	
Does our evidence support our claim with data from relevant sources (investigations, models, readings, videos, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Reasoning	
Does our reasoning describe why we included these data as evidence in our argument?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Article 4-2: \$500 Reward

\$500 Reward for Information Leading to Arrest and Conviction of Salamander Habitat Paint Vandals

Endangered Tiger Salamanders in New Jersey

Behind the Bayshore Mall in North Cape May is a pond critically important to **tiger salamanders**, a species endangered in the State of New Jersey. A concrete wall and a chain link fence were put up to protect the salamanders when the mall was built in 1986. Recently, several individuals cut the fence and poured eight 55-gallon drums of blue, orange, and white paint into the pond. Despite a \$10,000 cleaning operation paid for by the New Jersey Spill Fund, the tiger salamanders in the area may never recover.



Photo: Robert Zappalorti

\$500 Reward

The NJ Audubon Society is offering \$500 for information leading to the arrest and conviction of the vandals.

Reactions of New Jersey Citizens

Tom Gilmore, President of the NJ Audubon Society, was especially disturbed. "Tragically, the wall that should have protected the endangered salamanders hid the damage to their pond instead," he said. "We want to make it clear that such viciousness is unacceptable."

Eric Stiles, the NJ Audubon Vice-President of Conservation, appeared visibly angry. He said, "If I had the time to go after these people myself, I would. Our fight is to save wildlife and habitats everywhere, but hearing about such senseless, thoughtless actions... Well, it's one of the sadder parts of my job."¹

¹ Adapted from New Jersey Audubon Society, www.njaudubon.org.

Name _____ Date _____

Thinking About the Tiger Salamanders' Disappearance

1. What did you learn in this science unit that you did not know before?

2. What was your favorite part of this unit? Why?

3. Which investigations and/or practices were most helpful for answering the Driving Question (*Why did the tiger salamanders disappear?*) Why?
