

Ancient. Adored. Endangered.

Axolotls are more popular—and in deeper trouble—than ever before.

About the Story

Lexile® Measure 1000L

For qualitative complexity factors, go to Scope Online.

Learning Objective: to synthesize key ideas from a nonfiction article and an infographic

Featured Skill: synthesis

Additional skills covered in this lesson plan: cause and effect, compare and contrast, problem and solution, text features, key ideas and details, critical thinking

Essential Questions:

- Why do certain animals become popular?
- How do humans impact the environment?
- How can humans live in balance with nature?

Standards:

The article and its suite of support materials support these Common Core anchor standards: R.1, R.2, R.3, R.4, R.5, R.6, R.7, R.9, W.2, SL.1, SL.2

For more standards information—including TEKS—go to Scope Online.



Your Teaching Package

Find your full suite of support materials at scope.scholastic.com.

Audio:

- Article read-aloud
- Text-to-speech
- Vocabulary

Video:

- Mexico City and Its Ancient Salamanders

Differentiated Article:

- Lower-Lexile version

Connected readings from the Scope archives:

- Special Collection: Earth Day Every Day

Activities to print, project, or share digitally:

- Vocabulary: Definitions and Practice
- Discussion Questions
- Featured Skill: Synthesis
- Choice Board
- Video Discussion Questions
- Core Skills Workout: Text Structures*
- Lesson Plan Slide Deck
- Quiz*

*Available on two levels

Step-by-Step Lesson Plan

1. Prepare to Read (20 minutes)

Preview Vocabulary (10 minutes)

- Project the Google Slides version of **Vocabulary: Definitions and Practice** on your whiteboard. Review the definitions and complete the activity as a class. Highlighted words: *conserve, ecology, habitat, indigenous, invasive, pesticides*. Audio pronunciations of the words and a read-aloud of the definitions are embedded on the slides. Optionally, print the PDF version or share the slideshow link to your LMS and have students preview the words and complete the activity independently before class.

Watch a Video (10 minutes)

- Introduce the topic of the articles students are about to read by showing them the video “Mexico City and Its Ancient Salamanders.” Have students respond to the **Video Discussion Questions** (available in your Resources tab) in small groups or pairs.

2. Read and Discuss (45 minutes)

“Ancient. Adored. Endangered.”

- Read the article once as a class. (*Differentiation: Share the lower-Lexile version of the article.*) Optionally, have students listen to the **audio read-aloud** of the article while they follow along. The audio read-aloud is located in the Resources tab in Teacher View and at the top of the story page in Student View.
- Divide students into groups to read the article again and respond to the following **Discussion Questions**, also located in the Resources tab.

Discussion Questions (25 minutes)

The following questions can be shared in printable or interactive form.

- How has Mexico City changed over time? How have these changes affected axolotls?** (cause and effect) *As the population of Mexico City has grown, lakes have been drained and filled in to make room for buildings, roads, and houses. Lake Xochimilco, which used to be home to*

wild axolotls, is now polluted, full of poisonous chemicals and human waste. The ecology of the lake has also been damaged by the Mexican government, which filled it with carp and tilapia to help fishers. These invasive fish prey on axolotls. What used to be a vast network of lakes and wetlands has been reduced to a few bodies of polluted water. As a result, axolotls are unable to survive in their natural habitat and they are now critically endangered.

2. **Mexico City and the ancient city of Tenochtitlán had similar problems—both needed to find a way to feed a growing population. How did each city solve this problem? Which city came up with a better solution?** (compare and contrast) *In Tenochtitlán, the Aztecs constructed a vast system of large floating gardens, called chinampas, in the lakes around the center of the city. This system enabled the Aztecs to grow dozens of different kinds of vegetables, fruits, and grains, while still allowing the marine life in the surrounding water to thrive. The Aztecs figured out a way to live in harmony with the land. In Mexico City, on the other hand, people opted to change the land. They reduced the size of the wetlands and added invasive fish to the waters. The vast majority of the floating gardens have been abandoned, and some that remain in use are farmed using chemical pesticides and fertilizers, which pollute the water. Considering how Mexico City has damaged the ecosystem, you can conclude that Tenochtitlán had the better solution.*
3. **How are people trying to help restore the wild axolotl population?** (problem and solution) *To help the wild axolotl population, people are working to restore parts of Lake Xochimilco and create sanctuaries where axolotls can once again thrive. Ecologist Luis Zambrano is trying to help local farmers restore chinampas and return to natural farming methods that do not pollute the waters. People are also planting native grasses and plants to naturally filter the water, and people have installed mesh grates around the floating gardens to keep invasive carp and tilapia out.*
4. **What does the sidebar “The Valley of Mexico: Then & Now” add to the article?** (text features) *The sidebar helps readers understand how drastically the landscape of what is now Mexico City has changed over time. It emphasizes that the actions of humans can impact the environment in major ways, and helps us understand the negative consequences urban development and climate change can have on species.*

“All About Axolotls”

- Break students into groups again to read and discuss the infographic.
- As a class, discuss the following **Discussion Questions**.

Discussion Questions

(10 minutes)

The following questions can be shared in printable or interactive form.

1. **Why are so many different groups of people fascinated with axolotls? Refer to both the article and infographic to support your response.** (key ideas and details) *According to “Ancient. Adored. Endangered.,” the ancient Aztecs believed axolotls had a spiritual connection to Xolotl, the god of fire and lightning, and the axolotl is still celebrated in Mexican culture today. Scientists are also fascinated by axolotls, in particular their ability to regenerate parts of their bodies. The amphibians are being used to research new medicines. As the infographic explains, axolotls are also modern-day celebrities, admired for their appearance, popular in video games, and huge on social media.*
2. **How is the popularity of axolotls helping the species?** (critical thinking) *Programs such as the “Adopt an Axolotl” program at UNAM are helping raise money to restore the axolotl’s habitat in Mexico. The popularity of axolotls also helps raise awareness of the issues axolotls face.*
3. **Many people believe wild animals should not be kept as pets, but roughly 1 million axolotls live in labs and home aquariums. Is it ethical to keep so many axolotls in captivity?** (critical thinking) *Answers will vary. Some students may say that since axolotls are unable to survive in their natural habitat, it is OK to keep them in captivity. Others may say that we should be doing more to restore and protect the habitats of axolotls so they can return to their natural environments. We should learn from the past not to disrupt ecosystems.*

3. Write About It: Synthesis (45 minutes)

- Have students complete the **Featured Skill Activity: Synthesis**. This activity prepares them to respond to the writing prompt on page 16 in the printed magazine and at the bottom of the digital story page:

Axolotls have been described as being both everywhere and nowhere. Write a well-organized paragraph explaining what this means. Use information from both texts to support your answer.

- Alternatively, have students choose a task from the **Choice Board**, a menu of culminating tasks. (Our Choice Board options include the writing prompt from the magazine, differentiated versions of the writing prompt, and additional creative ways for students to demonstrate their understanding of a story or article.)

Connected reading from the Scope archives:

For more articles and stories that explore the relationship between humans and the environment and how environmental problems can be solved, check out our [Special Collection: Earth Day Every Day](#).