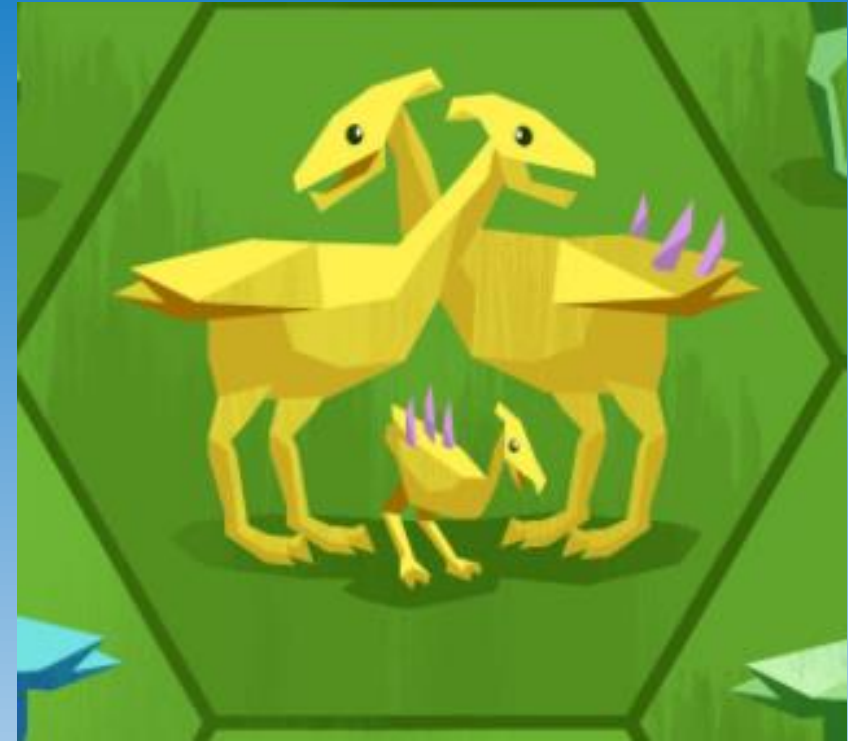


Chapter 2: Natural Selection and Reproduction



19 Lessons
Natural Selection

2.3: "The Deadly Dare"





2.3.1: WARM-UP

HAND IN

How Populations Change Sherman's Stories #3: Green Dragonflies

After reading another of *Sherman's Stories*, students consider a po

Claim Additions from Lesson 2.2

1. Poison Level 10 is the most common because the newts with this trait were able to live longer than other newts.
2. Poison Level 10 is the most common because the newts with this trait reproduce more than other newts.

1. What do you think Sherman is right about?

2. What do you think Sherman is wrong about?



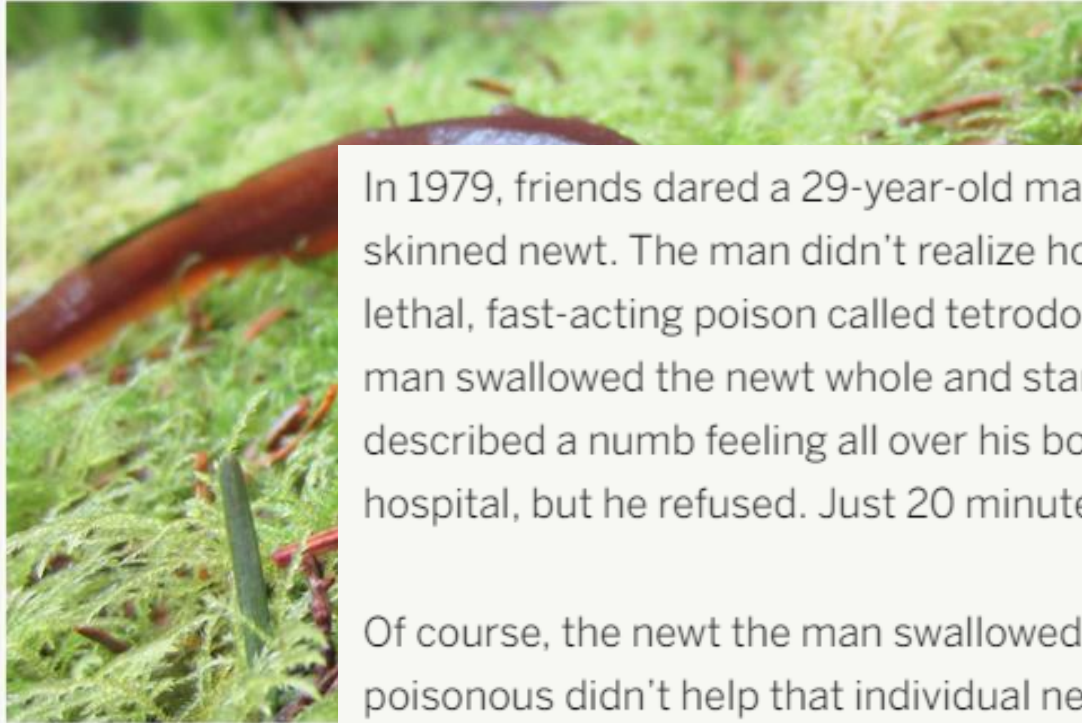


2.3.2: ACTIVE READING: "THE DEADLY DARE"

After the teacher models Active Reading, students read and annotate "The Deadly Dare" article.
(25 min)

To help you with your investigation, you will read an article that describes how poison helps rough-skinned newts to survive and how it became more common.

The Deadly Dare: Rough-Skinned Newt Defenses



Rough-skinned newts m
Shutterstock

In 1979, friends dared a 29-year-old man in Oregon to swallow a living rough-skinned newt. The man didn't realize how poisonous rough-skinned newts are. A lethal, fast-acting poison called tetrodotoxin (TTX) oozes from their skin. The man swallowed the newt whole and started feeling weak a few minutes later. He described a numb feeling all over his body. His friends tried to take him to a hospital, but he refused. Just 20 minutes later, the man was dead.

Of course, the newt the man swallowed died, too. In that particular case, being poisonous didn't help that individual newt survive. If newts have to be eaten in order to defend themselves, being poisonous doesn't sound like a very good defense! How is being poisonous—having a high level of TTX poison—an adaptive trait for a rough-skinned newt?

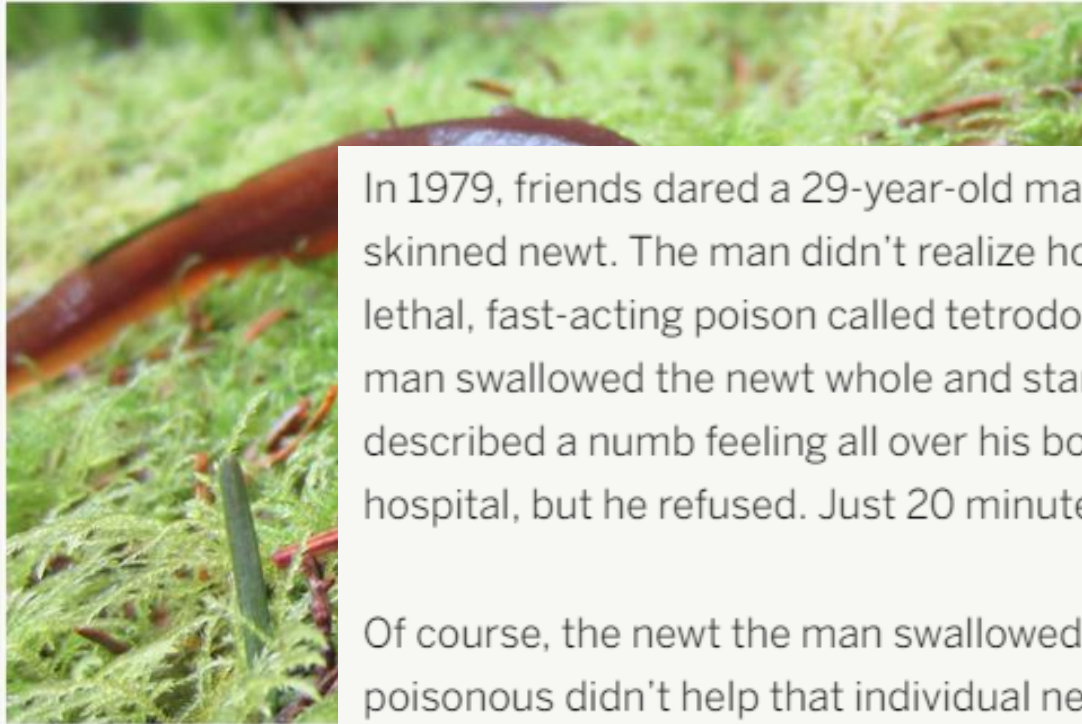


2.3.2: ACTIVE READING: "THE DEADLY DARE"

After the teacher models Active Reading, students read and annotate "The Deadly Dare" article.
(25 min)

When scientists read new material they often **think about how it connects with what they already know**. Making connections while you read helps your brain find a place for the new information. It helps you to better understand and use the information you are reading about.

The Deadly Dare: Rough-Skinned Newt Defenses



Rough-skinned newts m
Shutterstock

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2.3.2: ACTIVE READING: “THE DEADLY DARE”

After the teacher models Active Reading, students read and annotate “The Deadly Dare” article.
(25 min)

Open “The Deadly Dare”, read and annotate.

Active Reading Guidelines

1. Think carefully about what you read. Pay attention to your own understanding.
2. As you read, annotate the text to make a record of your thinking. Highlight challenging words and add notes to record questions and make connections to your own experience.
3. Examine all visual representations carefully. Consider how they go together with the text.
4. After you read, discuss what you have read with others to help you better understand the text.

In 1979, friends dared a 29-year-old man in Oregon to swallow a living rough-skinned newt. The man didn't realize how poisonous rough-skinned newts are. A lethal, fast-acting poison called tetrodotoxin (TTX) oozes from their skin. The man swallowed the newt whole and started feeling weak a few minutes later. He described a numb feeling all over his body. His friends tried to take him to a hospital, but he refused. Just 20 minutes later, the man was dead.

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Reviewing Annotations

1. Look over your annotations on the "The Deadly Dare" article. Pick one or two of your annotations to share with a partner. Then, edit the annotations and add "#share."
2. Discuss the tagged annotations with your partner. After your discussion, edit these annotations and change the tag to "#discussed."
3. Choose a question or connection (either one you already discussed or a different one you still want to discuss with the class). Edit the annotation and write "#present."

Discussing Annotations

Carefully choose an interesting annotation (comment, question, connection, vocabulary word) you'd like to share with your partner and add #share to this annotation.

#share

Add #discussed to your annotation if you feel that you and your partner have resolved a question OR if your discussion gave you a deeper understanding about something in the article.

#discussed

Add #present to your annotation to mark any unresolved questions or ideas you would like to present to the class.

#present



Reflecting on Annotations

Review your annotations and record something about the text that you discussed with your partner. Then press NEXT and then HAND IN to submit your article.

Rough-skinned newts may look harmless, but they are extremely poisonous. Shutterstock



In 1979, friends dared a 29-year-old man in Oregon to swallow a living rough-skinned newt. The man didn't realize how poisonous rough-skinned newts are. A lethal, fast-acting poison called tetrodotoxin (TTX) oozes from their skin. The man swallowed the newt whole and started feeling weak a few minutes later. He described a numb feeling all over his body. His friends tried to take him to a hospital, but he refused. Just 20 minutes later, the man was dead.

What is something about the text that you discussed with your partner?



2.3.3: ACTIVE READING: "THE DEADLY DARE"

HAND IN

natural selection: the process by which the distribution of traits in a population changes over many generations

“How do some traits become more common over many generations while others become less common?”



2.3.4: HOMEWORK

HAND IN

Homework

Students read an article to learn about the history of science.

Reading "Wallace and Darwin"

You have learned a lot about natural selection. To learn more about other scientists who have studied natural selection, open the "[Wallace and Darwin](#)" article in the Amplify Library. Read the article and answer the questions below. Then, press HAND IN to submit your article.

Wallace and Darwin

Charles Darwin came up with the idea of natural selection—right? In his book *On the Origin of Species*, Darwin introduced the idea of natural selection and the way it changes populations over time. However, Darwin wasn't actually the only scientist who was working to explain how populations change over time. Many other scientists were already thinking along the same lines. In fact, there was one other scientist who came up with nearly the same idea at the same time. His name was Alfred Russel Wallace.



Rate how successful you were at using Active Reading skills by responding to the following statement:

As I read, I paid attention to my own understanding and recorded my thoughts and questions.

Never

Almost never

Sometimes

Frequently/often

All the time

What is one interesting thing you learned from reading the article?