Teaching Lightning Bolt Books™
Animals in Danger

Interest Level: Grades K–2
Reading Level: Grade 2

Titles in this series:
Endangered and Extinct Amphibians
Endangered and Extinct Birds
Endangered and Extinct Fish
Endangered and Extinct Invertebrates
Endangered and Extinct Mammals
Endangered and Extinct Reptiles

Standards

Next Generation Science Standards
• Constructing explanations and designing solutions (Science and Engineering Practices)
• Obtaining, evaluating, and communicating information (Science and Engineering Practices)
• Patterns (Crosscutting Concepts)
• Cause and effect (Crosscutting Concepts)
• LS3B: Variation of traits (Disciplinary Core Ideas)
• LS4D: Biodiversity and humans (Disciplinary Core Ideas)
• ETS1B: Developing possible solutions (Disciplinary Core Ideas)

Common Core Reading (Informational Text)
• Key Ideas and Details
• Craft and Structure
• Integration of Knowledge and Ideas
• Range of Reading and Level of Text Complexity

Common Core Writing
• Text Types and Purposes
• Research to Build and Present Knowledge

Multiple Intelligences Utilized
• Verbal-linguistic, visual-spatial, logical-mathematical, intrapersonal, interpersonal
Lesson 1
Finding Definitions

Materials
• Animals in Danger series
• pencils
• lined paper
• children’s print or online dictionaries, such as Merriam-Webster’s www.wordcentral.com.

Prepare
• Gather print dictionaries, one for every three or four students, or arrange for online access.
• Choose one Animals in Danger book to use for the lesson.

Pretest
• What do you do when you don’t know the meaning of a word?
• What is a glossary?
• Where is the glossary in a book?

Model
• Turn to the table of contents on page 3 in the chosen book.

Read
• Read one book from the Animals in Danger series.

Practice
• As students read, they will write down any unknown words on their own paper.
• As students read, they will look up each unknown word in the glossary.

Discuss
• How does a glossary help us when we’re reading?
• What other books have glossaries?
• Is it easier to use a glossary or a dictionary?

Evaluate
• Review students’ sentences to make sure they’ve used the words correctly.

Purpose
Students will learn how to use a glossary and a dictionary.

• Point out the glossary entry in the table of contents and then turn to the glossary on page 30.
• Explain that the glossary is a collection of definitions of certain words used in a book and that different books in the same series have different glossaries. Point out that the entries are listed in alphabetical order.
• Tell the students that if they can’t find a word in a book’s glossary or if a book doesn’t have a glossary, they can look up the word in a dictionary.
• If the glossary doesn’t list a word, the student will look it up in the dictionary.
• After learning a word, students will write a sentence that uses the word in context. If the student can’t think of a sentence, she or he can just write down the definition.
Lesson 2
Compare and Contrast Animals

Purpose
Students will complete a Venn diagram comparing two extinct or endangered animals.

Materials
• Animals in Danger series
• Venn Diagram p. 7
• pencils

Prepare
• Copy Venn Diagram p. 7 for each student or show it electronically and ask students to copy it into their notebooks.
• Choose a book from the Animals in Danger series to use as an example.

Pretest
• How is a dog like a cat? How is a dog different from a cat?

Read
• Read books in the Animals in Danger series.

Model
• Using the example Animals in Danger book, demonstrate how to complete Venn Diagram p. 7
• Ask students what is alike about the two animals in the book. Write their responses in the middle section of Venn Diagram p. 7 Ask students what is different about the two animals. Write their responses in the correct sections of the diagram.

Practice
• Each student will choose a book in the series and read it again. Each student will choose two animals to compare.
• Students will complete Venn Diagram p. 7 filling in their chosen animals and traits.

Discuss
• Which differences between the animals surprised you? Did any similarities surprise you?

Evaluate
• Assess completed diagrams for understanding of comparing and contrasting.

• Remind students that characteristics can include how animals look or act, where they live, and why they’re endangered or extinct.
Lesson 3
Why Are Animals in Danger?

Purpose
Students will understand why animals become endangered and go extinct and they will learn how humans can help prevent these events.

Materials
- Animals in Danger series
- other books, websites, or periodicals about endangered and extinct animals
- Cause and Prevention Chart p. 8
- pencils

Prepare
- Make copies of Cause and Prevention Chart p. 8.
- Gather a few additional books, websites, or periodicals on animal endangerment and extinction.

Pretest
- Why do animal species become endangered or go extinct?

Read
- Read one book from the Animals in Danger series.

Discuss
- As a class, make a list of the animals mentioned in the book.

Model
- Divide students into groups of two or allow students to choose their partners.
- Explain that in the left column of Cause and Prevention Chart p. 8 students will write down why animals in the book are endangered or extinct.
- In the right column, students will write down ways to prevent or stop those reasons from happening.

Practice
- Students will write down correlating ways to prevent extinction.

Evaluate
- Evaluate students’ completed charts for completion and comprehension.
- Assess students’ teamwork and discussion.
Lesson 4
A Scientist’s Logbook

**Materials**
- Animals in Danger series
- paper
- pencils
- colored pencils or markers
- other books, websites, or periodicals about endangered and extinct animals

**Prepare**
- Hand out lined paper to the class or have students use their own paper.

**Pretest**
- If you were a scientist studying animals in the wild, where would you go?

**Read**
- Read books in the Animals in Danger series.

**Model**
- Choose an extinct animal from an Animals in Danger book to model. Invite the class to make a list of traits about the animal.
- Explain that students will do this again with a different extinct animal. They will write about their animals as if they were scientists in the wild that had just discovered an animal thought to be extinct.

**Practice**
- Using Animals in Danger books and the additional resources, each student will describe what the extinct animal looks like. They will also outline the animal’s habitat and what it eats.
- Next, each student will write about how he or she found the animal and what he or she will do to protect the species from extinction.
- Students may also draw pictures of the animals they wrote about.

**Discuss**
- What do you think scientists would do if they discovered a species thought to be extinct?

**Evaluate**
- Assess students’ logbook entries for comprehension of the Animals in Danger book.

**Purpose**
Students will use factual information about an extinct species to write a fictional entry in a scientist’s logbook.
Lesson 5  
Learning and Presenting More

Purpose
Students will research and present information about an endangered or extinct animal.

Materials
- Animals in Danger series
- other books and web sites for research
- pencils
- crayons, colored pencils, or markers
- poster board or a computer and projector

Prepare
- Gather additional books and web sites about endangered and extinct animals.

Pretest
- What are the parts of a good presentation?
- What makes a presentation interesting and fun?

Read
- Read the Animals in Danger series.

Model
- Have students write down at least three animals from any of the books that they would like to research.

- Students will take turns choosing an animal to study. If a student’s first three choices have already been chosen, allow two students to research the same animal or help the student find a new animal.
- Ask students where they might look for more information. Show them the Further Reading section on page 31 of the books as an example of additional resources.
- Demonstrate how to use note cards to give presentations. Explain that not all information in a presentation has to be written. Some can be said out loud by the presenter.

Practice
- Each student will research an animal using books and online resources.
- Students will make posters or prepare electronic presentations. Presentations should include what the animals eat or ate, where they live or lived, pictures of what they look or looked like, and why they are in danger or extinct. How can we protect this animal, or how could we have protected this animal before it became extinct?
- Students will use their note cards as they present their animals to the class.

Discuss
- What have you learned about the animals?
- How can people your age help protect endangered species?

Evaluate
- Review posters for completeness and interest.
- Assess presentations for preparation and effort.
Teaching Animals in Danger

Name ____________________________

Venn Diagram

**Directions:** In the blanks, write the names of the two animals from your book. In the middle section, write traits that both animals share. In the left section, write traits of one animal that are different from the second animal. In the right section, write traits of the second animal that are different from the first animal.

Both

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**Cause and Prevention Chart**

**Directions:** Write down five causes of extinction or endangerment in the left column. In the box to the right of each cause, write down a way to prevent the cause.

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