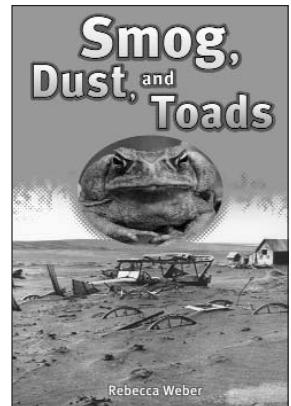


Smog, Dust, and Toads

by **Rebecca Weber**



Book Summary

Environmental disasters have caused a lot of damage to our planet and affected the lives of many people. This book looks at three disasters and explains why they happened.

Features of the Book

- Three examples of environmental disasters
- Historical information and photographs
- Maps and labeled diagrams
- Cause-and-effect relationships

Purpose

Smog, Dust, and Toads can be used to introduce and reinforce the following skills and understandings:

- using strategies to determine the meaning of unfamiliar words;
- recognizing cause-and-effect relationships;
- studying the use of adjectives;
- determining the author's message;
- writing to support an opinion;
- exploring the ways people's actions can have a negative effect on the environment.

Investigation Tools

- What's the Background? – The Industrial Revolution, page 5
- Step-by-step – Smog, page 10
- Looking Closer – Changing the Natural Balance, page 15
- Making Connections – Floods in China, page 19
- Digging Deeper – The Cane Toad, page 24
- Weighing Both Sides – Pest or Pet?, page 26

The Guided Reading Lesson

- Using strategies to determine the meaning of unfamiliar words
- Recognizing cause-and-effect relationships

You may need to spend extra time familiarizing your students with the concepts and specialized vocabulary in this book. This lesson could be taken over two or more days.

Introducing the text

Look at the book's cover together.

- *What do you think smog, dust, and toads could have in common?*

Read the blurb on the back of the book together.

- *What is an environmental disaster? How do you know?*
- *Have you heard about any environmental disasters? (oil spills, global warming, forest fires)*

If the students have little prior knowledge, describe one or two environmental disasters.

- *Why is something called an environmental disaster?*
- *What might have caused it?*

Reading and discussing the text

Ask the students to read pages 4 and 5 silently.

- *What did you do when you came to the last two words on page 4?*

Discuss the strategies they used for reading unfamiliar words, then “think aloud” to model a useful strategy.

For example:

- *I think that “industrial” must come from the word “industry,” and I know that industry involves factories.*
- *I also know that a revolution is a big change.*
- *When I put that information together with the text on these pages, I figured out that the industrial revolution was probably a time when big changes came about because of factories.*

Reread and discuss page 4 with the students to confirm the meaning.

Ask the students to read to the end of page 7, then demonstrate this strategy again. Think aloud as you use the context and the illustrations to figure out the meaning of “slums.” The students can then look at the glossary to check the meaning.

The students can now read the rest of chapter 1.

- *What was life like in London in the 1800s?*
- *What caused the smog? (smoke from factories and home fires, no wind)*
- *What were its effects? (Air pollution meant people had trouble breathing and some people died.)*

Show the students how they can use the text, the photographs, and the diagrams to learn about the causes and effects of smog.

Ask the students to read chapter 2, thinking about the causes of The Dust Bowl and its effects on the people and the land. When they have finished reading, discuss the use of fact boxes, maps, and the radio report.

The students can now read the rest of the book. Encourage them to think about the similarities between the three environmental disasters. Review the information by asking the students to explain the causes and effects of each disaster.

Revisiting the Text

The activities below can be used immediately after the guided reading lesson, during later reading sessions as mini-lessons, or as independent activities.

S Studying the use of adjectives

Ask the students to reread pages 8 and 9 to find words that describe London.

- *How would the meaning change if you used different adjectives?*
- *How do adjectives make the description better?*

The students can practice adding or changing adjectives to explore how to change the meaning of text.

S Determining the author’s message

Ask the students to reread pages 12, 21, and 28.

- *Why do you think the author wrote this book?*
- *What is the author trying to teach us? (People need to think ahead.)*

S Exploring the ways people’s actions can have a negative effect on the environment

Look at each of the environmental disasters.

- *How did people cause each disaster?*
- *How could people have prevented each disaster?*

Reread the information on page 26 together. Ask the students to evaluate another issue in the book, such as the problems associated with factories or wheat farming.

S Writing to support an opinion

✍ The students can use the blackline master on page 81 to express their opinion on one of the environmental issues in the book.