

Killer Smog

How an environmental disaster helped us
breathe easier today

About the Story

Lexile® Measure 900L

For qualitative complexity factors,
go to *Scope Online*.

Learning Objective: to
identify key ideas and details in a
narrative nonfiction article

Featured Skill: key ideas and
details

**Additional skills covered in
this lesson plan:** author's
craft, figurative language,
inference, central ideas and
details

Essential Questions:

- What responsibility do we have for our environment?
- How does human activity affect the environment?
- How can we reduce air pollution?

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.7, 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

Slideshow:

- Vocabulary

Video:

- Behind the Scenes

Differentiated Articles:

- Lower-Lexile version
- Spanish language version

Connected readings from the *Scope* archives:

- Special Collection: Earth
Day Every Day

Activities to print, project, or share digitally:

- Vocabulary: Definitions
- Video Discussion Questions
- Close-Reading and
Critical-Thinking Questions
- Featured Skill: Key Ideas and
Details
- Choice Board
- **Core Skills Workout:**
Summarizing*, Text Features,
Text Structure*, Text Evidence*,
Nonfiction Elements
- 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 **Vocabulary Slideshow** on your whiteboard. Review the definitions and complete the activity as a class. The audio pronunciations of the words and a read-aloud of the definitions are embedded on the slides. Highlighted words: *industrialized*, *mills*, *respiratory*, *slathered*, *toxins*

Watch a Video (10 minutes)

- Watch the **Behind the Scenes video**, in which author Lauren Tarshis discusses descriptive writing and shares three key writing techniques she used to write “Killer Smog.” Have students respond to the **Video Discussion Questions** (available in your Resources tab) in small groups or pairs.

2. Read and Discuss (45 minutes)

- Invite a volunteer to read the As You Read box on page 5 or at the top of the digital story page.
- Read the article once as a class. (*Differentiation: Share the lower-Lexile version or the Spanish 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 **Close-Reading and Critical-Thinking Questions**, also located in the Resources tab.

Close-Reading Questions

(30 minutes)

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

1. **Reread the first three paragraphs. Why might Lauren Tarshis wait until paragraph three to reveal that “this killer cloud was air”?** (author’s craft) *Tarshis likely waits to reveal that the “killer cloud was air” to create suspense and hook the reader’s attention. She also sets the reader up for a surprise; most people do not think of air as dangerous. This surprise draws the reader more deeply into the narrative—they will want to know how air can kill.*
 2. **Tarshis writes, “Black air crept under doors and through keyholes, filling up homes and offices and hospitals.” What literary device is Tarshis using here? What effect does it have?** (figurative language) *Tarshis is using personification to describe the poisonous smog that was present in London in 1952. By using the word “crept,” Tarshis is portraying the smog as a dangerous or sinister person who is sneaking into homes and offices and hospitals, looking to cause harm. The line creates an ominous and frightening mood.*
 3. **Why is air pollution like smog dangerous?** (key ideas and details) *Air pollution is dangerous because it contains toxic chemicals and particulates. Breathing in these toxins can damage the lungs and lead to serious health problems like asthma and pneumonia.*
 4. **Why did the British government do little to reduce air pollution in London before the Great Smog of 1952?** (key ideas and details, inference) *There are several likely reasons the government did little about the smog problem for many years. For one thing, most people didn’t fully understand the serious health consequences of air pollution. Plus, most Londoners could not afford to heat their homes with anything other than coal. In addition, factory owners worried that reducing pollution would be too expensive and could lead to factories closing and people losing their jobs—and the government likely took these concerns seriously.*
 5. **In the section “New Laws for Cleaner Air,” Tarshis writes, “The Great Smog of 1952 changed the way people thought about air pollution.” How does she support this statement?** (central ideas and details) *Tarshis supports this statement with the following details: After the Great Smog of 1952, the British and American governments passed laws to make air cleaner, pollution-producing factories were moved outside London, and the British government began helping residents pay for cleaner heating systems.*
- As a class, discuss the following questions.

Critical-Thinking Questions

(10 minutes)

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

1. **What are some obstacles to reducing air pollution? How can they be overcome?** *Obstacles include: the expense; a lack of awareness about the causes and the dangers; government or industry resistance to regulating pollution; and individuals feeling unable to change their lifestyles. Ways to overcome the obstacles include: governments creating laws to limit pollution further; increasing awareness about the causes and dangers; taking small steps like turning off lights, reducing cars on the road, carpooling when driving is necessary, and planting trees; and re-evaluating our priorities. (Answers will vary.)*
2. **What can we learn from Jesus Mendoza?** *Jesus Mendoza shows us that even though certain problems, like air pollution, can seem very daunting, there are simple things that we can all do to help make a difference, like taking public transportation or planting trees. Jesus also shows the power of community. If one person sets out to plant trees throughout a city, they might not get very far. But by banding together, Jesus and the other members of his volunteer group were able to plant more than 100,000 trees throughout their city of Tucson. When it comes to large-scale environmental problems like pollution, it will not take just one person to solve them; it will take all of us.*

3. Write About It: Key Ideas and Details (45 minutes)

- Have students complete the **Featured Skill Activity: Key Ideas and Details**. This activity prepares them to respond to the writing prompt on page 9 in the printed magazine and at the bottom of the digital story page:

What positive changes came from the Great Smog of 1952? In what ways can we continue to clean up the air today? Answer these questions in a well-organized essay. Use text evidence from the article and sidebars.

- 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.)

Support for Multilingual Learners

These questions are designed to help students respond to the text at a level that's right for them.

Yes/No Questions

Ask students to demonstrate comprehension with a very simple answer.

1. Is smog dangerous? *Yes, it is.*
2. Before 1952, did people understand smog was dangerous? *No, they didn't.*
3. Was London the only city where air pollution was a problem in the 1900s? *No, it wasn't.*
4. Did the Great Smog of 1952 change the way people thought about air pollution? *Yes, it did.*
5. Did governments take steps to reduce air pollution after the Great Smog? *Yes, they did.*

Either/Or Questions

Encourage students to use language from the question in their answer.

1. Does smog occur naturally or is it caused by human activity? *Smog is caused by human activity.*
2. Did people try to reduce air pollution before 1952, or was it not seen as a problem? *Air pollution was not seen as a problem.*
3. Did the Great Smog of 1952 lead to an increase or a decrease in air pollution in London? *The Great Smog led to a decrease in air pollution in London.*
4. Is air pollution still a problem around the world or has the problem been solved? *Air pollution is still a problem around the world.*
5. Are there things we can do to reduce air pollution, or is it impossible to reduce air pollution? *There are things we can do to reduce air pollution.*

Short-Answer Questions

Challenge students to produce simple answers on their own.

1. Why is smog dangerous? *Smog is dangerous because it contains toxins that can hurt our lungs and cause other health problems.*
2. How did the British government respond to the Great Smog of 1952? *The British government passed laws to make air cleaner, moved pollution-producing factories outside London, and helped residents pay for cleaner heating systems.*

Language Acquisition Springboard: Fill in the five “W” words while reading, then use the answers to generate questions after reading.

Who? (Which person or people is this article mainly about?) *Brian Bone and his family*

What? (What event does this article describe?) *one of the deadliest environmental disasters in history, when poisonous smog swept over London and killed 12,000 people*

When? (At what time did this event occur?) *1952*

Where? (In what place or location did this event take place?) *London, a city in England*

Why? (What was the reason for or cause of this event?) *Pollution from factory smokestacks and home chimneys mixed with the fog that often hung over London, creating a smog filled with toxic chemicals and particulates.*

Connected readings from the *Scope* archives:

- [Special Collection: Earth Day Every Day](#)