

# The Great Stink

In 1858, a sewage crisis in London changed the course of history.

## About the Story

**Lexile:** 910L

For qualitative complexity factors, go to Scope Online.

## Learning Objective:

to synthesize information about sanitation challenges past and present from two nonfiction articles

## Key Skills:

author's craft, key ideas and details, cause and effect, tone, supporting details, synthesis

## Essential Questions:

- Why is access to clean water important?
- What drives innovation?
- How are problems solved?

## Standards:

The articles and lesson support these Common Core anchor standards: **R.1, R.2, R.3, R.4, R.5, R.7, R.9, W.2, SL.1, SL.2, L.4, L.5, L.6.** For more standards information—including TEKS—go to *Scope Online*.



## Your Teaching Support Package

Find your full suite of materials at [scope.scholastic.com](https://scope.scholastic.com).

### Audio:

- The articles
- Vocabulary

**Literature Connections:** ideas for connecting to curricular texts

### Skill Builders to print or project:

- Vocabulary
- Preparing to Write: Applying a Quote
- Close Reading and Critical Thinking
- **Core Skills Workout:** Text Evidence\*, Central Ideas and Details\*
- Quiz\*
- Contest Entry Form

\*Available on two levels

# Step-by-Step Lesson Plan

## Close Reading, Critical Thinking, Skill Building

### 1 Preparing to Read

#### Do-Now: Fill in the blanks.

(7 minutes)

Write the following statements on the board:  
*443 million school days are lost each year because of \_\_\_\_\_-related diseases. Half of the world's hospital beds are filled with people suffering from a \_\_\_\_\_-related disease. One in nine people do not have access to clean \_\_\_\_\_. If you know the word that fits in all three blanks, write down three things you use it for each day.* Give students a few minutes to respond. (The answer is *water*.) Invite them to share their lists.

#### Preview vocabulary.

(10 minutes, activity sheet online)

Project or distribute the **Vocabulary Words and Definitions**. Highlighted words: *conventional, developing countries, epidemics, fertilizer, intricate, organic, putrid, treatment plants*

### 2 Reading and Discussing "The Great Stink"

(30 minutes, activity sheets online)

- Invite a student to read aloud the As You Read box on page 17. Then read the article as a class. Optionally, play the audio from Scope Online.
- Discuss the following questions as a class.

#### Close-Reading Questions

**How does author Allison Friedman draw readers into her article?** (author's craft)

*Friedman draws readers into her article by addressing them directly and placing them in the story she is telling. She uses sensory details to help readers imagine the time and place—horses clip-clop, women glide, and kids sell newspapers, cigars, and fried fish. She also vividly describes the horrific smell, writing that "the steaming*

*heat is cooking the filthy river into a bubbling, foul-smelling stew" (17) and tells readers that the river has caused tens of thousands of deaths. She finishes with a rhetorical question about whether this crisis can be solved, creating suspense that makes readers want to learn more.*

**What factors contributed to the 1858 sewage crisis in London?** (key ideas and details)

*Rapid population growth and the migration of people from farms to urban areas increased the amount of waste in London and decreased the demand for night soil. In addition, water from new flush toilets flooded cesspools, which led people to connect their cesspools directly to the sewers that led to the Thames. As a result, the Thames became overloaded with human waste.*

**How did a lack of scientific knowledge affect human health in 19th-century England?**

**How did the construction of London's sewer system change people's understanding of how disease can spread?** (cause and effect) *A lack of scientific knowledge about bacteria, waterborne illness, and how diseases spread meant people didn't understand the importance of sanitation. The lack of sanitation led to cholera epidemics. But the construction of London's sewer system changed the way people understood cholera—it eventually helped them realize that polluted water was the source of disease and that cholera and other diseases could therefore be prevented.*

**Describe Friedman's tone in the final section. What words or phrases help create this tone?** (tone) *The tone could be described as cautionary, as Friedman warns that the sewer systems that were once marvels are now breaking and leaking. The section's title, "A New Crisis" and the phrase "If we don't take action" help to create this tone.*

## "Toilets of the Future"

(15 minutes, activity sheets online)

Read the article as a class and respond to the following questions. Some refer to both texts.

### Close-Reading Questions

**In the introduction, author Mackenzie**

**Carro poses a series of questions. What**

**purpose do these questions serve?** (author's

craft) *The questions encourage readers to*

*consider the consequences of not having toilets.*

*They also help the reader empathize with people*

*who do not have safe sanitation.*

**Something innovative is new, advanced,**

**and creative. What makes the toilets Carro**

**presents innovative?** (supporting details)

*The toilets presented are innovative because*

*they can be used in places that don't have*

*conventional sewer systems. Plus, they do not*

*use water, a limited resource. And they all use*

*waste as a resource, putting it to work to perform*

*other important tasks, such as generating*

*electricity and fertilizing plants.*

**What is the relationship between water**

**and disease?** (key ideas) Many diseases

are spread through water that has been

contaminated by human waste.

## Critical-Thinking Questions

Consider the innovations discussed in

**"The Great Stink"—the flush toilet and**

**sewer systems. What do they teach us**

**about how innovation influences our lives?**

*Students may say that innovation improves*

*our lives, allows humans to survive and thrive,*

*and solves problems, but can also create new*

*problems.*

**How can a crisis help lead to important**

**change?** *A crisis can be an opportunity*

*to cooperate and solve problems and to*

*create new systems entirely. A crisis also brings*

*attention to issues that have been neglected and*

*inspires people to make important changes.*

**In what ways, if any, do you think**

**differently about water and sanitation after**

**reading these articles?** *Answers will vary.*

## 3 Skill Building and Writing

(15 minutes, activity sheet online)

Have students complete **Preparing to Write:**

**Applying a Quote.** This synthesis activity will

prepare students for the prompt on page 21.

*For alternate culminating tasks, see below.*

## Differentiate and Customize

### For Struggling Readers

In a well-organized paragraph, explain why safe sanitation is important. Use details from both articles to support your ideas.

### For Advanced Readers

Consider the saying "Necessity is the mother of invention." What does it mean? How does it apply to sanitation challenges past and present?

In your answer, draw on information from the articles as well as a third text of your choice.

### For Researchers

Research one of the toilets from "Toilets of the Future" or another innovation that is attempting to address the global sanitation crisis. Create a slideshow or podcast about the innovation.

### For Activists

Do additional research about the importance of having access to clean water. Present your findings as an infographic, podcast, slideshow, or essay.