Paired Texts, pp. 10-13

The Great Stink/
Toilets of the Future
The past and future of how humans tackle the problem of waste

About the Article

Levels
Lexile Range: **800L-900L**
Guided Reading Level: **U**
DRA Level: **50**

Learning Objectives
Students will synthesize information from two articles to draw a conclusion: The need for safe sanitation has sparked inventions for dealing with human waste.

Content-Area Connections
Social studies: history
Science: inventions

Key Skills
Synthesizing, vocabulary, main idea, cause and effect, descriptive details, supporting details, compare and contrast, author’s craft, explanatory writing

Standards Correlations
This article and lesson support the following Common Core anchor standards: **R.1, R.2, R.3, R.4, R.7, R.9, W.2, SL.1, L.6**
Check our website for more standards information.

Your Teaching Support Package
Here’s your full suite of materials, all of which you’ll find at storyworks.scholastic.com:

Audio:
• On-level version  • Lower-Lexile version

Text Features Slideshow

Differentiated article:
• Lower-Lexile version (printable)

Skill Builders:
• Domain-Specific Vocabulary
• Close-Reading and Critical-Thinking Questions*
• Core Skills Workout: Analyzing Two Texts: Synthesizing, Text Features, Summarizing,* Text Evidence*
• Comprehension Quiz*
• Questions for English Language Learners

*Available on two levels
emptied their cesspools into the city’s sewers, which were not designed for human waste.

• Reread “A Whiff on the Wind.” What details does the author use to help you understand how bad the smell was? (descriptive details) The author says that “grown men and women fainted in the streets. People miles away threw up after catching a whiff on the wind. Government leaders . . . fled with tears streaming from their eyes.”

• According to “A Whiff on the Wind,” why was the Thames water deadly? (supporting details) Poop contains germs that can cause many diseases, including cholera. The poop-filled Thames was London’s main source of drinking water. People had been drinking poison.

• According to “A New Crisis,” what pressures have caused the original sewers in many cities to leak, break, clog, and overflow? (cause and effect) Since the 1800s, the population of many cities has grown tremendously. Climate change has caused heavier storms that overload pipes with rainwater. The original sewers have too much to handle.

• The first paragraph of “Toilets of the Future” includes a series of questions: “But
what if your home didn’t have a toilet? What if no homes in your town had one? Where would all that waste go?” Why do you think the author chose to include these questions? (author’s craft) This series of rhetorical questions helps readers put themselves in the shoes of people who don’t have a toilet in their home; a major point of the article is that many places around the world do not have safe ways to get rid of human waste.

- Why might the waterless toilets described in the article be a better solution to getting rid of human waste than building more regular toilets and sewers? (main idea) Sewer systems require a lot of money to build and water to work. Many developing countries don’t have enough money or water to build one, so an inexpensive waterless alternative is an advantage.

Critical-Thinking Questions
- Why is it important to safely get rid of human waste? Answer using details from both articles. (synthesizing) It is important to safely get rid of human waste because otherwise it ends up in food and water sources. Many people die each year from diseases related to poor sanitation. Millions of others get sick. The failure to safely get rid of human waste can even cause a health crisis, like that caused by the Great Stink.

- How did the Great Stink and the world’s current sanitation challenges described in the second article inspire important changes? (synthesizing) In both cases, people have come up with creative solutions to the problem at hand. In 1858, the Great Stink motivated people to build new sewers running alongside the river rather than into it. The current challenges have caused people to invent innovative waterless toilets: the self-powering toilet, the worm toilet, and the composting toilet.

3. Skill Building
Featured Skill: Synthesizing
- Distribute the synthesizing Skill Builder. After students complete it, have them respond to the writing prompt on page 13.

Differentiate and Customize

For Struggling Readers
Gather students in a small group and read the story aloud with them or play our audio version. Pause at the end of each section and ask students to point out details about what London was like during the Great Stink, creating a list together. They can use the list to write a paragraph describing the city as if they were London residents in 1858.

For ELL Students
Listen to the lower-Lexile audio version of the article with students. Afterward, work with students to orally summarize the many problems London faced during the Great Stink and what the solution was to this sanitary crisis.

For Advanced Readers
Ask students to explore other examples of how necessity has caused people to create important new inventions. Prompt them to think about transportation, health care, or other areas and find out what motivated important innovations.

For Small Groups
Have students work in groups to research sewers and toilets throughout world history. Ask them to make a “Sanitation Timeline,” starting with the sewers in ancient South Asian cities and ancient Rome described in the first article and ending with the “toilets of the future” described in the second article.