

Clues in Soho

Trace how evidence, people, and events reshape an explanation.

CCSS.ELA-Literacy.RI.11-12.3 "Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Circle each person or major idea, underline each piece of evidence, and draw arrows between marks that show how one influenced, challenged, or supported another. This will help you trace how the investigation develops.

The Broad Street Investigation

- ① In August 1854, cholera spread rapidly through Soho, a crowded London neighborhood. Most officials accepted the miasma theory, which held that poisonous air caused disease. Physician John Snow doubted that explanation because cases seemed to cluster around particular water sources. He and local resident Henry Whitehead visited homes, recorded deaths, and asked families where they got drinking water. Snow placed the addresses on a map. The growing concentration near the Broad Street pump did not prove the pump caused cholera, but it gave Snow a pattern that the miasma theory could not easily explain.
- ② Snow's map became more useful when investigators compared exceptions to the main pattern. Workers at a nearby brewery drank beer and had few cases, while residents who preferred water from another source also suffered less often. Whitehead initially believed the outbreak came from bad air, yet his conversations helped trace several deaths to Broad Street water. He later learned that a baby with cholera had lived near the pump. Waste from the child's soiled diapers had entered a leaking cesspool close to the well, providing a possible route from an infected person to the water supply.
- ③ On September 8, officials removed the Broad Street pump handle, limiting access to its water. The outbreak was already declining, so this action alone could not settle every question about its cause. Still, Snow's map, Whitehead's local evidence, and the contaminated-well explanation reinforced one another. Snow later presented his findings to medical audiences, but many people continued to support miasma for years. The episode did not immediately create modern germ theory. Instead, it showed how mapping, interviews, and environmental investigation could challenge a widely accepted idea and direct attention toward contaminated water.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How did Snow's map challenge the miasma theory, even though the map did not prove the pump caused cholera?

2 How did the brewery workers and residents who used another water source strengthen the investigation's main pattern?

3 Explain how Whitehead's role develops over the investigation.

4 Why does the passage say that removing the pump handle could not, by itself, settle the cause of the outbreak?

3 YOUR TURN _____ Your own words

Write exactly four sentences that trace how at least three pieces of evidence or events in the investigation work together to challenge the miasma theory. Include one sentence explaining why the pump-handle removal must be interpreted cautiously.

PART 1 • READ AND MARK

Circle each person or major idea, underline each piece of evidence, and draw arrows between marks that show how one influenced, challenged, or supported another. This will help you trace how the investigation develops. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did Snow's map challenge the miasma theory, even though the map did not prove the pump caused cholera?	The map showed a concentration of cases near the Broad Street pump, a pattern that poisonous air did not explain well. It suggested that a water source deserved investigation.
2	How did the brewery workers and residents who used another water source strengthen the investigation's main pattern?	Their lower rates of illness showed that people who did not drink Broad Street water were less affected, supporting the idea that water access mattered.
3	Explain how Whitehead's role develops over the investigation.	Whitehead began by believing in miasma, but his local conversations traced deaths to Broad Street water. His later discovery about the baby and leaking cesspool provided a possible contamination route.
4	Why does the passage say that removing the pump handle could not, by itself, settle the cause of the outbreak?	The outbreak was already declining before the handle was removed. The action limited water access, but it did not alone prove why cholera had spread.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Snow turned household reports into a map, making the concentration near the pump visible. The brewery and alternate-water cases tested that pattern by showing that access to different drinks changed people's risk. Whitehead's discovery about the leaking cesspool supplied a plausible physical link between cholera waste and the well. Although officials removed the handle, the outbreak's earlier decline means that action supports the investigation's importance without proving it ended the outbreak.

Accept equivalent explanations that accurately connect evidence, individuals, and events rather than listing them separately. For the open task, require four sentences, at least three connected details, and a cautious interpretation of the handle removal.