Evidence Before Action

Investigate a claim, weigh its limits, and apply it to a new decision

MWH.P.1.2.A "Develop, investigate, and evaluate plausible answers to essential questions that reflect enduring understandings across time, real world circumstances, and social studies disciplines."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two details that support Snow's water explanation, circle one detail that limits what we can conclude about the pump's removal, and number two fields of study that could help a community decide what to do.

The Broad Street Pump

1. In late August 1854, cholera swept through a crowded part of London near Broad Street. The disease can cause severe diarrhea and dangerous dehydration. At the time, many people blamed bad air for outbreaks. Physician John Snow suspected that water from the Broad Street pump was carrying the disease instead. He checked where people who died had lived and spoke with residents about the water they drank. Many deaths were near the pump. Yet a cluster of deaths by itself could not prove what caused the illness: people living close together also shared streets, shops, and air.

2. Snow looked for cases that might test his idea rather than simply repeat it. Workers at a nearby brewery rarely became ill; the brewery had its own water source, and workers often drank beer instead of pump water. Snow also investigated people who lived farther away but drank Broad Street pump water and became sick. These accounts supported a water explanation, though not every drink or illness could be checked. Officials removed the pump handle on September 8, making its water harder to obtain. The outbreak was already declining by then, so removal alone cannot be credited with ending it.

3. Snow's inquiry raises a question that still matters: When evidence is incomplete, how should a community act to protect people? Geography can show whether cases cluster near a source, while history can reveal how residents' choices and living conditions shaped exposure. Civics examines who can order a water source closed and whose needs count in that decision. Economics asks what a closure costs people who depend on that source. In a present-day town with suspected water contamination, officials might restrict access while investigators test the supply. They would also need to explain both the evidence and its limits to residents.

2 ANSWER WITH EVIDENCE

Use the passage

1. How might Snow's investigation help answer the passage's question about acting when evidence is incomplete? Support your answer with one detail from the passage.

2. Which two observations tested Snow's water explanation beyond finding deaths near the pump?

3. How could geography and civics each contribute a different kind of question to an investigation like Snow's?

4. Why does the passage not support the claim that removing the pump handle alone ended the outbreak?

3 YOUR TURN

Your own words

A town has repeated street flooding after a new shopping center opens, but no one knows the cause. In four or five sentences, propose a temporary action, identify two pieces of evidence to investigate, use one social studies discipline to weigh the decision, and explain one limit to your conclusion by connecting it to Snow's investigation.

ANSWER KEY

Evidence Before Action

HIGH SCHOOL · MWH.P.1.2.A

PART 1 · READ AND MARK

Underline two details that support Snow's water explanation, circle one detail that limits what we can conclude about the pump's removal, and number two fields of study that could help a community decide what to do. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How might Snow's investigation help answer the passage's question about acting when evidence is incomplete? Support your answer with one detail from the passage.	**A community can take a protective step while continuing to investigate. Officials removed the pump handle even though the available evidence could not establish exactly what ended the outbreak.**
2	Which two observations tested Snow's water explanation beyond finding deaths near the pump?	**Brewery workers who used another water source rarely became ill, while some people who lived farther away but drank Broad Street pump water became sick.**
3	How could geography and civics each contribute a different kind of question to an investigation like Snow's?	**Geography could ask where cases cluster in relation to a water source. Civics could ask who has authority to close that source and whose needs the decision affects.**
4	Why does the passage not support the claim that removing the pump handle alone ended the outbreak?	**The outbreak was already declining when officials removed the handle.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The town could temporarily close the flooded street during heavy rain while it investigates. Investigators should compare rainfall records from before and after the center opened and ask residents which streets flooded earlier. Geography could help them examine whether the flooded streets lie downhill from the new paved area. The timing of construction does not prove the center caused the flooding, just as removing the pump handle did not prove it ended the outbreak. The town should change its plan if further evidence points to another cause.

Accept other plausible, passage-supported answers that distinguish evidence for a claim from proof of its cause. In the open response, accept different temporary actions and disciplines if the student investigates two relevant kinds of evidence and identifies a genuine limit to the conclusion.