Testing the Shift

Analyze a workplace report's claim, evidence, and limits.

11.RI.1 "Key Ideas and Confirming Details Interpret and complete an application for employment or college admission, and summarize the intent, main ideas, and purpose of the workplace or technical documents. Analyze the hypotheses, data, analysis..."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the hypothesis and conclusion, circle each numerical result, and write 1 beside each limitation or proposed check. Use your marks to judge whether the evidence supports the conclusion.

Riverbend Charging Pilot

1. At Riverbend Distribution Center, managers tested whether shifting the start of battery-charger cycles would reduce afternoon electricity demand without delaying shipments. The pilot ran for six full weeks, from Monday, April 1, through Sunday, May 12, 2024. On weekdays, forklift batteries that normally began charging at 2:00 p.m. were scheduled to begin at 6:00 p.m., after the shipping rush. The report compared each pilot weekday with the same weekday during the six weeks before the change. It tracked utility meter readings, completed orders, and the time of the last daily shipment.

2. Average electricity demand between 2 and 5 p.m. fell from 1,180 kilowatts before the pilot to 1,020 kilowatts during it, a decrease of about 14 percent. The warehouse completed an average of 1,246 orders per weekday before the change and 1,239 during the pilot. The average final-shipment time moved from 6:18 p.m. to 6:21 p.m. The report says these small differences do not show an operational delay. It also notes that April and early May had milder weather than February and March, so reduced air-conditioning demand may have affected the meter readings.

3. The operations director concludes that later charging likely lowered peak demand and recommends a longer trial. That recommendation is cautious because the report uses meter readings and shipment records that directly relate to its question. However, the comparison lacks a control warehouse, and the two periods occurred in different seasons. An independent analyst could compare the center's hourly utility data with local temperature records and with a similar warehouse that kept its charging schedule unchanged. If demand fell more at Riverbend than at the comparison warehouse on equally warm days, that evidence would strengthen the conclusion.

2 ANSWER WITH EVIDENCE

Use the passage

1. What hypothesis did the managers test, and what two outcomes did they need to monitor to test it?

2. Which numerical evidence supports the claim that the new charging schedule reduced afternoon demand?

3. Why is the report's conclusion about demand limited, even though the meter readings are relevant evidence?

4. What additional comparison would most strongly corroborate the director's conclusion, and why?

3 YOUR TURN

Your own words

Choose a claim from a workplace, school, or technical report you have read or can access. In 3 or 4 sentences, state the claim, evaluate one piece of evidence, and explain what separate source or data could corroborate or challenge it.

ANSWER KEY

Testing the Shift

GRADE 11 · 11.RI.1

PART 1 · READ AND MARK

Underline the hypothesis and conclusion, circle each numerical result, and write 1 beside each limitation or proposed check. Use your marks to judge whether the evidence supports the conclusion. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What hypothesis did the managers test, and what two outcomes did they need to monitor to test it?	**They tested whether later battery charging would reduce afternoon electricity demand without delaying shipments. They monitored electricity demand and shipment performance, including completed orders and final-shipment time.**
2	Which numerical evidence supports the claim that the new charging schedule reduced afternoon demand?	**Average demand from 2 to 5 p.m. fell from 1,180 kilowatts before the pilot to 1,020 kilowatts during it, about a 14 percent decrease.**
3	Why is the report's conclusion about demand limited, even though the meter readings are relevant evidence?	**The pilot and comparison periods were in different seasons, and milder weather may have reduced air-conditioning demand. The study also had no control warehouse.**
4	What additional comparison would most strongly corroborate the director's conclusion, and why?	**Compare Riverbend's hourly utility data with a similar warehouse that kept its charging schedule unchanged, while accounting for equally warm days. This would help separate the effect of charging time from weather or other differences.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

A school transportation report claims that adding a later bus route reduced late arrivals. Its daily attendance logs are relevant evidence, but comparing only one month before and after the change could be affected by weather or testing schedules. I would compare late-arrival records from a similar school that did not add a route and check district weather records.

Accept responses that accurately identify the report's hypothesis, data, conclusion, and limitations. For Part 3, accept varied claims and sources when the student explains how the source would test the quality of the evidence or conclusion.