Testing the Past

Design a fair test of how students interpret historical evidence.

P.1.10 "Construct a testable hypothesis and apply the principles of research design to an appropriate experiment."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the testable prediction, circle what changes between groups and what is measured, and number two choices that make the comparison fair.

Can Context Change a Conclusion?

1. A history teacher wants to know whether brief context helps students interpret a historical source. Her class reads a verified transcription of a 1918 newspaper notice announcing the cancellation of public gatherings during an influenza outbreak. The notice can show what officials announced, but it cannot show whether every resident followed the announcement. The teacher predicts that students who see a short context note before reading will more accurately distinguish claims the notice supports from claims it cannot support than students who read the notice alone. This prediction names a change and an outcome that can be measured.

2. To test the prediction, the teacher randomly assigns students to two groups. Both groups receive the same transcription and have five minutes to read it. One group also receives a short note explaining that public notices record announcements, not the actions of every person; the other group does not. Students then answer four new questions about which conclusions the notice can support. Each answer earns one point using a scoring guide written in advance. The teacher removes names and group labels before another teacher scores the responses, so the scorer does not know which version each student read.

3. The teacher compares each group's average score, rather than judging a few striking answers. Random assignment helps spread prior knowledge and reading skill across the groups, although a small class may still differ by chance. She could give students a short prior-knowledge check first and use it to examine whether the groups began with similar knowledge. If the group with the note scores higher, the result would support the prediction for this class, not prove that context notes always help. Afterward, all students receive the note and discuss why a newspaper notice cannot reveal every resident's actions.

2 ANSWER WITH EVIDENCE

Use the passage

1. Write the teacher's hypothesis as an if-then statement that names both groups and the measured result.

2. What does the teacher change between groups, and how does she measure the result?

3. How do using the same transcription and reading time, along with random assignment, make this a fairer test?

4. If the note group has a higher average score, what can the teacher conclude, and what can she not conclude?

3 YOUR TURN

Your own words

Choose a different historical source and design a classroom test of whether a reading aid helps students evaluate it. State an if-then hypothesis, what you would change and measure, two steps to make the comparison fair, and one limit on your conclusion.

Testing the Past

PART 1 · READ AND MARK

Underline the testable prediction, circle what changes between groups and what is measured, and number two choices that make the comparison fair. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Write the teacher's hypothesis as an if-then statement that names both groups and the measured result.	**If students read the context note, then they will score higher on questions about what the notice can support than students who read the notice without the note.**
2	What does the teacher change between groups, and how does she measure the result?	**She changes whether students receive a context note. She measures the result with scores on four questions about conclusions the notice can support.**
3	How do using the same transcription and reading time, along with random assignment, make this a fairer test?	**The same transcription and reading time keep those conditions from explaining a score difference. Random assignment helps spread differences in prior knowledge and reading skill across groups.**
4	If the note group has a higher average score, what can the teacher conclude, and what can she not conclude?	**The result would support the prediction for this class. It would not prove that context notes help every group interpret every historical source.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

If students receive a glossary of unfamiliar terms while reading a verified women's suffrage flyer, then they will score higher on questions about its claims and evidence than students without the glossary. I would randomly assign students to glossary and no-glossary groups. Everyone would read the same flyer for the same amount of time. I would use a prepared scoring guide to score four questions. A higher average would support the hypothesis for these students, but it would not show that glossaries help with every historical source.

Accept equivalent, measurable hypotheses and designs that compare groups fairly. For Part 3, the reading aid and source should differ from the passage, and the stated limit should match the scope of the proposed test.