

Bottleneck Breakdown

Analyze a process problem and judge a practical solution.

11.W.1.B.iii "Write analyses that: Examine and evaluate processes and/or problems to propose solutions."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline statements that explain what causes the lunch-line bottleneck. Circle each proposed solution, then number the pieces of evidence or criteria that would be used to judge whether the solution works.

Fixing a Lunch-Line Bottleneck

- ① At Riverton High, the lunch line often slows during the first ten minutes of fourth period. Students join one long queue even when a second serving station has no customers. A review of five lunch periods showed that the bottleneck begins at the entrance: students cannot see the menu boards until they are already in line, and many pause to decide after reaching the cashier. Staff members also restock drinks from a cooler beside the cashier, briefly blocking payment. The problem is not simply that too few students fit in the cafeteria. It is that choices, payment, and restocking collide at one point.
- ② Adding another cashier might help, but it would not stop students from making decisions at the register or prevent the cooler from blocking the counter. Moving the menu boards to the entrance would let students choose before joining a line. The school could also post a QR code linking to the daily menu, although that option should supplement, not replace, visible signs because some students may not have a phone or reliable data. Finally, a staff member could restock drinks before lunch and during the last five minutes, when demand usually falls. These changes target separate steps in the process rather than treating the line as a single problem.
- ③ To test the proposal, Riverton should run a two-week pilot rather than purchase new equipment immediately. During the pilot, administrators can record the time from a student's arrival at the entrance to payment, count how many students use each station, and note when restocking occurs. They should compare these measures with data from similar lunch periods before the changes. If wait times fall at both stations without increasing skipped meals or staff workload, the school can keep the new routine. If the second station remains unused, leaders should investigate whether its location, food options, or signage is discouraging students. This evidence-based revision would make the solution responsive instead of automatic.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What two conditions near the cashier create the bottleneck? Explain how each condition slows the process.

2 Why does the writer say that adding another cashier would not fully solve the problem?

3 How does the writer evaluate the QR-code menu option? Include one benefit and one limitation.

4 What information should administrators collect during the pilot, and what result would show that the new routine is working?

3 YOUR TURN _____ Your own words

Write a 150-200 word analysis of a problem in a school process, such as tutoring sign-ups, bus loading, club registration, or technology checkout. Explain at least two causes, evaluate at least two possible solutions, propose a plan, and name evidence the school should collect to judge the plan.

PART 1 • READ AND MARK

Underline statements that explain what causes the lunch-line bottleneck. Circle each proposed solution, then number the pieces of evidence or criteria that would be used to judge whether the solution works. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What two conditions near the cashier create the bottleneck? Explain how each condition slows the process.	Students decide after reaching the cashier because they cannot see menus earlier, and drink restocking blocks the payment area. Both delays occur at the same point in the line.
2	Why does the writer say that adding another cashier would not fully solve the problem?	Another cashier would not stop students from deciding at the register or keep the cooler from blocking payment.
3	How does the writer evaluate the QR-code menu option? Include one benefit and one limitation.	It could help students see the daily menu before entering the line, but it should not replace visible signs because some students may lack a phone or reliable data.
4	What information should administrators collect during the pilot, and what result would show that the new routine is working?	They should collect entrance-to-payment times, station-use counts, and restocking times, then compare them with earlier similar lunch periods. The routine is working if wait times fall at both stations without increasing skipped meals or staff workload.

PART 3 • YOUR TURN (SAMPLE ANSWER)

After-school tutoring at Lakeview High begins with a paper sign-up sheet in the main office. Students must visit the office before 3:15, then the secretary sends the list to teachers. Many students learn they need help only after the office closes, and teachers sometimes receive incomplete lists. As a result, available tutoring seats go unused while other sessions lack enough materials. The school could keep the paper sheet and extend office hours, but that would require staff supervision every afternoon. It could also use an online form, yet a form alone would not help students who do not know which subject sessions exist. Lakeview should post a weekly tutoring schedule in classrooms and offer an online form that closes two hours before each session. A counselor should keep a paper option for students without internet access. For one month, the school should compare filled seats, late requests, and teacher preparation problems with earlier records. If late requests remain high, the closing time should be moved later.

Accept equivalent explanations that connect the bottleneck to specific steps in the lunch process and evaluate solutions using the passage's reasoning. For the open response, accept varied school problems if the student analyzes causes, weighs alternatives, proposes a feasible solution, and identifies relevant evidence for evaluation.