Signals Under Pressure

Compare several sources before making a public decision.

10.C.3.B "Monitor, analyze, and use multiple streams of simultaneous information."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle each information stream in the passage. Number the details that show how staff compare, verify, or act on those streams so you can trace how several sources lead to one decision.

Information at the Fire Center

1. During a fast-moving wildfire, an emergency operations center does not rely on one report. Staff members watch a map that shows wind direction and fire perimeters, listen to radio calls from crews, read evacuation messages sent by county deputies, and follow camera feeds from road intersections. Each stream arrives at a different speed and may cover a different location. A crew radio call can describe smoke behind a ridge before a satellite image updates. A traffic camera can show whether evacuation routes are moving, but it cannot explain why cars have stopped.

2. To make a decision, staff compare details rather than treating every alert as equally certain. Suppose the wind map shows gusts pushing east, while two crews report flames crossing a western drainage. The reports may describe different fire edges, or one source may be delayed. A supervisor checks timestamps, locations, and the number of independent sources. She may ask a crew to confirm its position and compare the reports with a recent aerial observation. If evidence conflicts, the team records the uncertainty instead of announcing a conclusion that could send people toward danger.

3. After weighing the streams, the center turns analysis into a clear public update. If cameras show cars backing up on Route 8 and deputies report that Route 8 is closed near Pine Road, the update should direct drivers to the open southbound route, not merely say that traffic is heavy. It should include the time of the report and identify the agency issuing it. Staff continue monitoring because a correct message can become outdated within minutes. Using several streams means noticing changes, checking conflicts, and choosing an action that matches the strongest current evidence.

2 ANSWER WITH EVIDENCE

Use the passage

1. Choose two information streams from paragraph 1. For each stream, explain one useful detail it can provide and one limit it has.

2. The wind map and crew reports seem to point to different fire locations. What steps should the supervisor take before deciding what is happening?

3. Why does the supervisor check timestamps, locations, and independent sources instead of accepting the first report?

4. What should the public update say about Route 8, and what two details should it include to make the message more useful?

3 YOUR TURN

Your own words

A school event coordinator receives three updates at nearly the same time: at 3:05 p.m., a field manager says the field is dry; at 3:10, an official weather alert reports lightning 12 miles away; at 3:12, a student video records thunder. Write exactly three sentences that weigh the evidence, identify a limit or conflict, and state an immediate action plus one follow-up check.

ANSWER KEY

Signals Under Pressure

GRADE 10 · 10.C.3.B

PART 1 · READ AND MARK

Circle each information stream in the passage. Number the details that show how staff compare, verify, or act on those streams so you can trace how several sources lead to one decision. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Choose two information streams from paragraph 1. For each stream, explain one useful detail it can provide and one limit it has.	**A crew radio call can report smoke behind a ridge quickly, but it may cover only the crew's location. A traffic camera can show whether cars are moving, but it cannot explain why they stopped.**
2	The wind map and crew reports seem to point to different fire locations. What steps should the supervisor take before deciding what is happening?	**Check timestamps and locations, count independent sources, ask a crew to confirm its position, and compare the reports with a recent aerial observation.**
3	Why does the supervisor check timestamps, locations, and independent sources instead of accepting the first report?	**The checks help determine whether sources describe the same event, whether information is delayed, and whether several sources support the claim.**
4	What should the public update say about Route 8, and what two details should it include to make the message more useful?	**It should direct drivers to the open southbound route. It should include the report time and the agency issuing the update.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

At 3:10 p.m., the official weather alert reports lightning 12 miles away, the field manager's 3:05 message says the field is dry, and a student video posted at 3:12 records thunder. The dry-field message does not address lightning, so the newer official alert and video provide stronger safety evidence. I would pause the event, move students inside, and check the official alert and field manager before resuming.

Accept equivalent source comparisons when students accurately state both a useful detail and a limitation. For the open task, accept reasonable safety actions that use the time, relevance, reliability, and agreement of multiple streams.