The Ventilation Brief

Study how precise technical language fits a facilities audience.

CCSS.ELA-Literacy.WHST.9-10.2d "Use precise language and domain-specific vocabulary to manage the complexity of the topic and convey a style appropriate to the discipline and context as well as to the expertise of likely readers."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline five domain-specific terms and circle two phrases that limit or qualify a claim. These choices help a technical brief give facilities readers accurate, usable information.

Pilot Study: Classroom Ventilation

1. This facilities brief recommends a pilot study of classroom ventilation during the winter heating season. In occupied rooms, people exhale carbon dioxide, so elevated indoor concentrations can indicate that outdoor-air delivery may not match occupancy. Carbon dioxide is not, by itself, a complete measure of air quality, but it can help staff identify rooms for closer inspection. The pilot would place nondispersive infrared sensors in six classrooms with different schedules, record readings at five-minute intervals, and compare the patterns with attendance, room use, and HVAC operating times.

2. Facilities technicians should first verify that each sensor is calibrated and positioned away from open windows, supply vents, and direct breathing zones. A single high reading does not prove that a ventilation system has failed. Instead, technicians can examine whether readings rise steadily during a full class period, fall when the room is empty, or remain unusually high while the air-handling unit is scheduled to operate. Those trends may point to issues such as a closed outdoor-air damper, an incorrect schedule, or a room used beyond its intended occupancy. The results should guide maintenance decisions, not diagnose health conditions.

3. After four weeks, the committee should receive a one-page technical summary rather than a general announcement to families. The summary should report the monitoring locations, dates, occupancy ranges, sensor limitations, and recurring patterns. It should distinguish observations from recommendations, for example, noting that Room 214 showed repeated afternoon increases before proposing an inspection of its ventilation controls. If repairs are needed, the final work order should name the equipment, describe the observed condition, and state the requested action. This level of detail allows facilities staff to prioritize work, document changes, and evaluate whether the intervention altered later readings.

2 ANSWER WITH EVIDENCE

Use the passage

1. The passage calls the tools “nondispersive infrared sensors.” What information does this precise term add that the word “sensors” alone does not?

2. Quote two phrases that keep readers from treating a carbon dioxide reading as definite proof of a ventilation problem. Explain what those phrases do.

3. Who is the likely audience for paragraph 2? Give two domain-specific words or phrases from that paragraph that support your answer.

4. Why does the writer recommend a one-page technical summary instead of a general announcement to families? Name two details that make the summary appropriate for its readers.

3 YOUR TURN

Your own words

Write a 55-70 word work-order note to facilities staff. A carbon dioxide sensor in Room 118 rose from 650 ppm at 8:00 a.m. to 1,850 ppm by 2:00 p.m. on three days, while occupancy stayed at 28 and the air-handling unit was scheduled to run. Use precise technical vocabulary, state the evidence, and request an action without diagnosing a health condition.

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PART 1 · READ AND MARK

Underline five domain-specific terms and circle two phrases that limit or qualify a claim. These choices help a technical brief give facilities readers accurate, usable information. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	The passage calls the tools "nondispersive infrared sensors." What information does this precise term add that the word "sensors" alone does not?	**It identifies the specific type of technology used to measure carbon dioxide.**
2	Quote two phrases that keep readers from treating a carbon dioxide reading as definite proof of a ventilation problem. Explain what those phrases do.	**Possible phrases include "can indicate," "may not match occupancy," "is not, by itself, a complete measure," "does not prove," and "may point to." They qualify the claim by showing that readings suggest issues but do not confirm a cause.**
3	Who is the likely audience for paragraph 2? Give two domain-specific words or phrases from that paragraph that support your answer.	**The likely audience is facilities technicians or maintenance staff. Supporting terms may include "calibrated," "supply vents," "air-handling unit," "outdoor-air damper," and "occupancy."**
4	Why does the writer recommend a one-page technical summary instead of a general announcement to families? Name two details that make the summary appropriate for its readers.	**Facilities staff need details that support maintenance decisions and follow-up. Appropriate details include monitoring locations, dates, occupancy ranges, sensor limitations, recurring patterns, equipment, observed conditions, and requested actions.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Please inspect the outdoor-air damper and ventilation controls serving Room 118. On three school days, the carbon dioxide sensor increased from 650 ppm at 8:00 a.m. to 1,850 ppm by 2:00 p.m. while occupancy remained 28 and the air-handling unit was scheduled to operate. Verify the operating schedule, document any fault, and repeat monitoring after corrective action.

Accept equivalent domain-specific terms and accurate explanations of how wording matches a technical facilities audience. For the open response, accept 55-70 words that cite the given evidence, use precise vocabulary, request a reasonable inspection or follow-up action, and avoid claiming a health diagnosis.