

Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-09-03

Name

Period

Date

Lesson

Lesson focus

Analyze trace evidence

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Analyze your trace-evidence observations with a CER and evaluate documentation limitations. Big idea: Observations only become evidence when you compare them against a reference and acknowledge what they cannot prove.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- forensic
- trace evidence
- biometric
- observation
- inference
- chain of custody
- control sample

My notes, examples, and questions

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Cornell Notes - Continued

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Must-know ideas
What should I understand by the end?

- Trace evidence must be compared to reference standards (known samples) to have meaning; an observation alone is not identification.
- Two key variables that affect trace-evidence interpretation are the condition of the sample (degraded vs. intact) and the analyst's reference library.
- Trace evidence rarely proves guilt alone; it corroborates other evidence in a convergent chain.

My notes, examples, and questions

Process notes
What happens during class?

- 0:00: Return Wednesday scene packets; review the chain-of-custody log together
- 0:10: Reference comparison: project reference fiber and hair characteristics; students compare their sketches
- 0:28: CER writing: claim about what the trace evidence suggests, evidence from observations, reasoning from comparison
- 0:50: Chain-of-custody audit: students check their own log for missing fields; flag gaps
- 1:02: List two variables that could change interpretation; state one limitation of trace evidence alone
- 1:10: Pair-share CERs; preview Friday submission

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Compare your trace-evidence descriptions to reference characteristics.
- Write a CER: what does this trace evidence suggest about the scene?
- Evaluate whether your chain-of-custody log would hold up to scrutiny.
- List two variables that could change trace-evidence interpretation.
- State one limitation of trace evidence as a sole source of proof.

Evidence: CER - CER arguing what the trace evidence suggests about the scene, using Wednesday's microscopy observations as evidence and acknowledging at least one limitation.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- I can write a CER from trace-evidence observations.
- I can identify limitations in evidence interpretation.

My notes, examples, and questions

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Cornell Notes - Continued

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Lab or safety notes
What must I handle carefully?

Supplies:

- Compound light microscope
- Prepared and blank microscope slides
- Coverslips
- Forceps
- Trace evidence samples (hair, fiber)
- Evidence log sheet and labels
- Camera or tablet for scene photos

My notes, examples, and questions

Summary

Today's lesson focused on Analyze trace evidence. The main target was: Analyze your trace-evidence observations with a CER and evaluate documentation limitations. The evidence of learning is CER: CER arguing what the trace evidence suggests about the scene, using Wednesday's microscopy observations as evidence and acknowledging at least one limitation.. In my own words, the most important idea from today is:

My summary

My final question or connection