Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-10-12

Name	Period	Date	Lesson
		2026-10-12	

Lesson focus

Analyze chronic trends

Key words and questions	Prepared details and student notes

Essential question
What is today's target?

Interpret bloodwork trends against normal ranges with a CER and evaluate data limits. Big idea: Trend analysis transforms a column of numbers into a clinical narrative about whether a patient is getting better, worse, or staying stable.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- blood glucose
- cholesterol
- risk factor
- telehealth
- wearable
- monitoring
- normal range

My notes, examples, and questions

Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-10-12

Cornell Notes - Continued

Key words and questions	Prepared details and student notes
Must-know ideas **What should I understand by the end?**	- A trend is described by its direction (increasing, decreasing, stable), rate of change (gradual vs. rapid), and relationship to the normal range boundary. - A single high reading might reflect a bad day, a recent meal, or lab error; a trend of consistently elevated readings over six months indicates a chronic condition. - Two variables that commonly affect blood glucose are diet and exercise in the 24 hours before the test; cholesterol is affected by fasting status at the time of the draw. **My notes, examples, and questions**
Process notes **What happens during class?**	- 0:00: Return Wednesday graphs; as a class, describe the trend for one marker using direction, rate, and range relationship - 0:12: Students describe the trend for their chosen marker in their own words in the notebook - 0:22: CER writing: claim (improving or worsening), evidence (specific trend description with data points), reasoning (why trend beats a single reading) - 0:48: Identify two variables that could affect the marker (e.g., diet, exercise, medication compliance) - 1:02: State one limitation of wearable or self-reported data for chronic-disease monitoring - 1:10: Pair-share CERs; preview Friday submission **My notes, examples, and questions**

Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-10-12

Cornell Notes - Continued

Key words and questions	Prepared details and student notes
Steps and evidence **What do I do and turn in?**	- Compare each marker's trend to its normal range over time. - Write a CER: is this patient's chronic condition improving or worsening? - Explain how a single reading could mislead vs. a trend. - Identify two variables that could affect a blood marker. - State one limitation of wearable or self-reported data. Evidence: CER - CER arguing whether the simulated patient's chronic condition is improving or worsening, using the Wednesday time-series graph as evidence and explaining why the trend is more informative than a single reading. **My notes, examples, and questions**
Checks for understanding **How do I know I got it?**	- I can interpret longitudinal trends against ranges. - I can explain why trends beat single readings. **My notes, examples, and questions**

Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-10-12

Cornell Notes - Continued

Key words and questions	Prepared details and student notes
Lab or safety notes **What must I handle carefully?**	Supplies: - Simulated blood panel data sheets - Normal-range reference chart - Calculator - Glucose meter demonstration kit - Wearable device or fitness tracker (demo) - Lab notebook for the monitoring plan **My notes, examples, and questions**

Summary

Today's lesson focused on Analyze chronic trends. The main target was: Interpret bloodwork trends against normal ranges with a CER and evaluate data limits. The evidence of learning is CER: CER arguing whether the simulated patient's chronic condition is improving or worsening, using the Wednesday time-series graph as evidence and explaining why the trend is more informative than a single reading.. In my own words, the most important idea from today is:

My summary

My final question or connection