

Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-10-07

Name

Period

Date

Lesson

Lesson focus

Bloodwork and ranges

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Identify routine blood tests and their normal ranges before the PLTW clinical-data task. Big idea: Routine blood panels provide quantitative snapshots of organ function and metabolic balance; trends over repeated tests reveal disease progression or response to treatment.

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

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Cornell Notes - Continued

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

- A complete blood count (CBC) measures red and white blood cell counts and platelets; fasting glucose normal range is 70-99 mg/dL; total cholesterol below 200 mg/dL is desirable.
- Chronic disease monitoring uses repeated measurements over months or years to detect trends that a single reading would miss.
- Telehealth platforms transmit patient-reported data and wearable sensor readings into the clinical record, but the clinician must validate them against lab-confirmed values.

My notes, examples, and questions

Process notes
What happens during class?

- 0:00: Open a real anonymized blood panel result; class reads it together and identifies unknown abbreviations
- 0:12: Teacher-led notes: CBC, fasting glucose, cholesterol panels; normal ranges and clinical significance of each
- 0:30: Chronic disease monitoring: how and why diabetes and cardiovascular disease are tracked over time
- 0:42: myPLTW: complete the clinical-data online task on routine bloodwork
- 1:02: Choose one blood marker to track Wednesday; write the variable name, units, and normal range
- 1:10: Exit ticket: state three blood markers and their normal ranges

My notes, examples, and questions

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Steps and evidence
What do I do and turn in?

- Take notes on common panels: CBC, glucose, cholesterol, and their ranges.
- Review how chronic-disease monitoring uses repeated measurements over time.
- Summarize how telehealth and wearables feed data into care.
- Complete the PLTW clinical-data online task on routine bloodwork.
- Identify the variable and units for one blood marker you will track.

Evidence: Exit ticket - Exit ticket: list three blood panel markers, their normal ranges with units, and one clinical condition associated with an out-of-range value for each.

My notes, examples, and questions

Checks for understanding
How do I know I got it?

- I can name routine blood tests and their normal ranges.
- I can explain how monitoring tracks chronic disease.

My notes, examples, and questions

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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 Bloodwork and ranges. The main target was: Identify routine blood tests and their normal ranges before the PLTW clinical-data task. The evidence of learning is Exit ticket: Exit ticket: list three blood panel markers, their normal ranges with units, and one clinical condition associated with an out-of-range value for each.. In my own words, the most important idea from today is:

My summary

My final question or connection