

Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-08-27

Name

Period

Date

Lesson

Lesson focus

Graphing and statistics

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Build a graph from collected data and compute descriptive statistics to summarize a sample. Big idea: Descriptive statistics and a well-labeled graph turn raw measurements into evidence a scientist can defend.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- safety
- PPE
- SDS
- variable
- control
- evidence
- chain of custody
- descriptive statistics

My notes, examples, and questions

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Cornell Notes - Continued

Key words and questions

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

- Mean, median, and range summarize a dataset's center and spread.
- Standard deviation quantifies how much individual measurements scatter around the mean, revealing precision.
- The choice of graph type (bar, line, scatter) depends on whether the independent variable is categorical or continuous.

My notes, examples, and questions

Process notes
What happens during class?

- 0:00: Quick-write: what is the difference between accuracy and precision? Share out
- 0:10: Direct instruction: mean, median, range, standard deviation, worked example with real numbers
- 0:28: Students calculate all four statistics for their Wednesday data; check with a partner
- 0:42: Graph construction: choose graph type, set labeled axes with units, plot data points
- 1:00: CER writing: what does the spread (SD) say about precision in your measurement?
- 1:10: Pair-share CERs; preview Friday submission checklist

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Enter Wednesday's measurements into a data table with labeled units.
- Calculate mean, median, range, and standard deviation for your sample.
- Choose an appropriate graph type and plot the data with titled axes.
- Write a CER: what does the spread of data tell you about precision?
- Identify one limitation that the standard deviation reveals about your method.

Evidence: Data table - Data table with three trials and units, calculations of mean/median/range/SD, a correctly labeled graph, and a 3-sentence CER explaining what the standard deviation reveals about precision.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- I can compute mean, range, and standard deviation.
- I can pick and label a graph that fits my data type.

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:

- Bound lab notebook
- Safety goggles
- Nitrile gloves
- Lab coat or apron
- Eyewash station
- Printed or digital Safety Data Sheet
- Chemical waste container

My notes, examples, and questions

Summary

Today's lesson focused on Graphing and statistics. The main target was: Build a graph from collected data and compute descriptive statistics to summarize a sample. The evidence of learning is Data table: Data table with three trials and units, calculations of mean/median/range/SD, a correctly labeled graph, and a 3-sentence CER explaining what the standard deviation reveals about precision.. In my own words, the most important idea from today is:

My summary

My final question or connection