

Cornell Guided Notes

Biotechnology for Health (Biomedical Innovations) | 2027-04-26

Name

Period

Date

Lesson

Lesson focus

Notebook submit

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Assemble and submit a complete transformation and gel laboratory notebook. Big idea: A complete laboratory notebook is the permanent record of experimental method, data, and conclusion.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- transformation
- selection
- colony
- digest
- gel electrophoresis
- DNA ladder

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?

- All numerical data in the notebook must include units.
- A conclusion ties the data back to the original hypothesis or expected result.
- Identifying one error source and an improvement shows scientific self-evaluation.

My notes, examples, and questions

Process notes
What happens during class?

- 0-5 min: Warm-up: what is missing from a lab notebook that just has data but no conclusion?
- 5-25 min: Compile transformation notes, plate colony counts, and gel map into one notebook document
- 25-45 min: Verify all data has units; verify conclusion references both transformation and plasmid results
- 45-60 min: Add one error source and one specific future improvement
- 60-72 min: Final check: is every page dated and labeled?
- 72-80 min: Submit notebook and confirm in tracker

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Compile your transformation notes, plate data, and gel map.
- Record colony counts and fragment-size estimates with units.
- State your conclusion about transformation and plasmid identity.
- Note one source of error and a future improvement.
- Submit the notebook and confirm it in your tracker.

Evidence: Lab report - Complete transformation and gel laboratory notebook: transformation notes, plate colony counts with units, gel standard curve, fragment-size estimates with units, conclusion on plasmid identity, one error source, and one future improvement.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- Your notebook documents transformation results and gel analysis.
- It includes a conclusion and is submitted.

My notes, examples, and questions

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Lab or safety notes
What must I handle carefully?

Supplies:

- Provided transformation plate images
- Gel electrophoresis chamber and power supply
- Agarose gel
- DNA ladder standard
- Restriction digest samples
- Micropipettes and tips
- Gel staining and imaging setup

My notes, examples, and questions

Summary

Today's lesson focused on Notebook submit. The main target was: Assemble and submit a complete transformation and gel laboratory notebook. The evidence of learning is Lab report: Complete transformation and gel laboratory notebook: transformation notes, plate colony counts with units, gel standard curve, fragment-size estimates with units, conclusion on plasmid identity, one error source, and one future improvement.. In my own words, the most important idea from today is:

My summary

My final question or connection