Cornell Guided Notes

Biotechnology for Health (Biomedical Innovations) | 2027-03-12

Name	Period	Date	Lesson
		2027-03-12	

Lesson focus

Validation plan

Key words and questions	Prepared details and student notes
Essential question **What is today's target?**	Design a test plan that defines the metrics needed to validate your prototype. Big idea: Validation requires measurable metrics, a control, and a defined pass/fail threshold. **My notes, examples, and questions**
Key words **What vocabulary unlocks the lesson?**	- literature review - peer review - decision matrix - validation - metric **My notes, examples, and questions**

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Cornell Notes - Continued

Key words and questions	Prepared details and student notes
Must-know ideas **What should I understand by the end?**	- A validation metric must have units and a numeric threshold to be testable. - A control gives you a baseline so you know whether the prototype is the cause of any result. - Identifying error sources in advance is a Lab SOP expectation. **My notes, examples, and questions**
Process notes **What happens during class?**	- 0-5 min: Warm-up: what would count as proof that your prototype does what you claim? - 5-20 min: State your prototype claim and choose two measurable metrics with units - 20-40 min: Write the test procedure with pass/fail thresholds - 40-55 min: Add a control or baseline and identify one error source - 55-70 min: Peer review: can your partner run your test from your written plan alone? - 70-80 min: Exit ticket: name your two metrics and their pass thresholds **My notes, examples, and questions**

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Steps and evidence **What do I do and turn in?**	- State the specific claim your prototype is supposed to satisfy. - Choose two measurable validation metrics with units. - Describe the test procedure, including what counts as a pass or fail. - Identify a control or baseline for comparison. - List one source of error and how you would reduce it. Evidence: Pre-lab - Validation plan with prototype claim, two measurable metrics with units and pass/fail thresholds, a control, a test procedure, and one error-reduction step. **My notes, examples, and questions**
Checks for understanding **How do I know I got it?**	- Your plan names two measurable metrics with pass/fail thresholds. - You included a control and one error-reduction step. **My notes, examples, and questions**

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Lab or safety notes **What must I handle carefully?**	Supplies: - Design notebook - Prototype materials or model - Decision matrix template - Ruler or measuring tool - Stopwatch or timer - Data recording sheet - Calculator **My notes, examples, and questions**

Summary

Today's lesson focused on Validation plan. The main target was: Design a test plan that defines the metrics needed to validate your prototype. The evidence of learning is Pre-lab: Validation plan with prototype claim, two measurable metrics with units and pass/fail thresholds, a control, a test procedure, and one error-reduction step.. In my own words, the most important idea from today is:

My summary

My final question or connection