

# Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-09-18

Name

Period

Date

Lesson

## Lesson focus

Analyze histology evidence

## Key words and questions

## Prepared details and student notes

**Essential question**  
**What is today's target?**

Interpret tissue and heart observations with a CER and evaluate identification limits. Big idea: Histological evidence requires comparison to normal reference tissue; a pathologist identifies disease by recognizing what is absent or distorted.

**My notes, examples, and questions**

**Key words**  
**What vocabulary unlocks the lesson?**

- homeostasis
- tissue
- organ system
- toxicology
- histology
- mechanism of death

**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?**

- Comparison to reference images is required because tissue appearance varies between individuals; diagnosis is based on deviation from normal, not on a single observation.
- Two variables that affect slide interpretation are the quality of the staining (how well the dye bound to structures) and the thickness and angle of the tissue section.
- Microscopy alone cannot determine cause of death; it must be combined with gross anatomy, clinical history, and toxicology for a complete forensic picture.

**My notes, examples, and questions**

**Process notes**  
**What happens during class?**

- 0:00: Return Wednesday lab notebooks; display reference histology images for all four tissue types
- 0:10: Guided comparison: walk through one tissue type together, identifying normal vs. abnormal features
- 0:22: Students compare their four sketches to references; annotate differences directly on their notebook sketches
- 0:38: Heart-pathology connection: for one heart structure, research and note one associated pathology (e.g., valve thickening, chamber enlargement)
- 0:52: CER writing: claim about what tissue damage could indicate cause of death, evidence from comparison, reasoning from pathology connection
- 1:05: List two slide-interpretation variables and one limitation of microscopy alone; preview Friday submission

**My notes, examples, and questions**

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**Steps and evidence**  
**What do I do and turn in?**

- Compare your tissue sketches to reference histology images.
- Write a CER: what tissue damage could indicate cause of death?
- Relate one heart structure to a possible pathology.
- Identify two variables that affect slide interpretation.
- State one limitation of microscopy for determining cause of death.

Evidence: CER - CER arguing what tissue damage could indicate as a cause of death, using Wednesday's microscopy observations as evidence and referencing a comparison to normal histology in the reasoning.

**My notes, examples, and questions**

**Checks for understanding**  
**How do I know I got it?**

- I can interpret histology against references.
- I can connect anatomy to possible pathology.

**My notes, examples, and questions**

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**Lab or safety notes**  
**What must I handle carefully?**

Supplies:

- Compound light microscope
- Prepared tissue slides (muscle, epithelial, nervous)
- Preserved heart or anatomical heart model
- Dissection tray and probe
- Nitrile gloves
- Lab notebook for histology sketches
- Sample toxicology data sheet

**My notes, examples, and questions**

## Summary

Today's lesson focused on Analyze histology evidence. The main target was: Interpret tissue and heart observations with a CER and evaluate identification limits. The evidence of learning is CER: CER arguing what tissue damage could indicate as a cause of death, using Wednesday's microscopy observations as evidence and referencing a comparison to normal histology in the reasoning.. In my own words, the most important idea from today is:

**My summary**

## My final question or connection