UNIT 4

Patient Perspectives

Showcase a medical story at an interactive exhibit and solve mini cases at the Quick Clinic. Integrate body systems, including the renal and digestive systems, to tell a patient's story clearly and with empathy.

CORNELL NOTEBOOK · fillable · John Hay Hornets

Essential questions for this unit

- How do the renal and digestive systems maintain the body's internal balance?
- How do multiple body systems interact within a single patient's case?
- How do we communicate a complex medical story clearly and with empathy?

Vocabulary bank (define each in your own words as you go)

- nephron
- filtration
- dialysis
- urinalysis
- electrophoresis
- enzyme
- digestion
- absorption
- microbiome
- transplant
- diagnosis
- exhibit
- case study
- empathy
- integration

How to use this Cornell notebook

1. NOTES (right column): take notes during class, video, reading, or lab.
2. CUES (left column): afterward, write questions and key terms that the notes answer. Some are seeded for you.
3. SUMMARY (gold box): in your own words, answer the essential question in 2-3 sentences.
4. Review by covering the notes and answering the cues from memory.

Tip: vetted readings, videos, and interactives for every lesson are on the class site under “Resources & readings.”

UNIT 4 · PATIENT PERSPECTIVES

Contents & notebook check

John Hay Biomedical · PLTW Human Body Systems · Cornell-style notebook

NAME

DATE PD

Number your pages and log each one as you finish. Use the date and self-rating columns for periodic notebook checks (rate 1-4 how complete the page is).

UNIT 4 · PATIENT PERSPECTIVES

Notebook rubric

John Hay Biomedical · PLTW Human Body Systems · Cornell-style notebook

NAME

DATE PD

How your notebook is scored. Aim for level 4 on every row. 4 Exemplary · 3 Proficient · 2 Developing · 1 Beginning.

Completeness & organization

MY SCORE

Every assigned page is present, in order, dated, and numbered.

Cue questions

MY SCORE

The left column has thoughtful questions and key terms that the notes answer.

Notes

MY SCORE

Notes are accurate and in your own words, with labeled diagrams where useful.

Summaries

MY SCORE

Each summary answers the essential question in 2-3 clear sentences.

Lab records

MY SCORE

Objective, data, and a claim-evidence-reasoning analysis are complete and dated.

MY GOAL FOR THIS UNIT'S NOTEBOOK

UNIT 4 · PATIENT PERSPECTIVES

4a Renal system: filtering the blood

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NAME

DATE PD

ESSENTIAL QUESTION

How does the kidney clean the blood and balance fluids?

CUE · QUESTIONS · KEY TERMS

- What does a nephron do, step by step?
- What does a urinalysis reveal?
- How does dialysis replace kidney function?
- How can electrophoresis support a diagnosis?

KEY TERMS

- nephron
- filtration
- dialysis
- urinalysis
- electrophoresis

NOTES

SUMMARY : in your own words, answer the essential question (2-3 sentences)

UNIT 4 · PATIENT PERSPECTIVES

4a Lab record: Nephron model & simulated urinalysis

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NAME

DATE PD

Dated lab record. This page is a gradeable artifact: complete every section.

OBJECTIVE (what question are you answering today?)

MATERIALS / SAFETY (equipment, PPE, SDS hazards noted)

DATA / OBSERVATIONS (record measurements; sketch or table as needed)

ANALYSIS (what does the data show? claim, evidence, reasoning)

REFLECTION (sources of error, next question, real-world link)

UNIT 4 · PATIENT PERSPECTIVES

4b Digestive system: fuel & enzymes

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NAME

DATE PD

ESSENTIAL QUESTION

How does the body break food into usable molecules?

CUE · QUESTIONS · KEY TERMS

- Mechanical vs. chemical digestion?
- Where is most nutrient absorption?
- What do digestive enzymes do?
- What role does the microbiome play?

KEY TERMS

- enzyme
- digestion
- absorption
- microbiome

NOTES

SUMMARY : in your own words, answer the essential question (2-3 sentences)

UNIT 4 · PATIENT PERSPECTIVES

4b Lab record: Enzyme / digestion investigation

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NAME

DATE PD

Dated lab record. This page is a gradeable artifact: complete every section.

OBJECTIVE (what question are you answering today?)

MATERIALS / SAFETY (equipment, PPE, SDS hazards noted)

DATA / OBSERVATIONS (record measurements; sketch or table as needed)

ANALYSIS (what does the data show? claim, evidence, reasoning)

REFLECTION (sources of error, next question, real-world link)

UNIT 4 · PATIENT PERSPECTIVES

4c Patient exhibit: integrating systems

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NAME

DATE PD

ESSENTIAL QUESTION

How do I tell one patient's story across multiple body systems?

CUE · QUESTIONS · KEY TERMS

- Which systems does this case touch?
- What is the diagnosis and evidence?
- How do I make the exhibit clear for a public audience?
- Where does empathy show up?

KEY TERMS

- transplant
- diagnosis
- exhibit
- case study
- integration
- empathy

NOTES

SUMMARY : in your own words, answer the essential question (2-3 sentences)

UNIT 4 · PATIENT PERSPECTIVES

Unit wrap-up & self-check

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NAME

DATE PD

“I can…” :check each skill, then rate your confidence (1-4)

4 explain how the nephron filters blood and interpret a urinalysis.

4 describe how the digestive system breaks down and absorbs nutrients.

4 integrate multiple body systems to explain and present a patient case.

What was the most important idea in this unit?

What is still confusing, and what is your plan to fix it?

How does this unit connect to a real biomedical career or case?