

Cornell Guided Notes

Human Anatomy & Physiology (Human Body Systems) | 2027-02-04

Name

Period

Date

Lesson

Lesson focus

Fracture analysis lab

Key words and questions

Prepared details and student notes

Essential question
What is today's target?

Analyze fracture types and joint movement using imaging or model data. Big idea: Classifying fractures from imaging data requires integrating bone anatomy, directional terms, and knowledge of joint types.

My notes, examples, and questions

Key words
What vocabulary unlocks the lesson?

- osteoblast
- osteoclast
- compact bone
- spongy bone
- fracture
- joint
- ligament

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?

- Fracture types: greenstick (incomplete, pediatric), transverse (perpendicular break), comminuted (shattered into fragments), spiral (twisting force).
- Joint types near common fracture sites: hinge (elbow, knee), ball-and-socket (hip, shoulder), pivot (proximal radioulnar).
- Fracture healing speed depends on bone type, blood supply, patient age, and fracture complexity.

My notes, examples, and questions

Process notes
What happens during class?

- 0-8: Safety and lab setup; review fracture-type reference card
- 8-20: Examine X-ray set or fracture model: classify and record
- 20-45: Complete classification table with fracture type and nearest joint
- 45-60: Predict healing speed for each fracture with written justification
- 60-75: Group comparison: resolve disagreements using reference
- 75-80: Submit classification table

My notes, examples, and questions

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Steps and evidence What do I do and turn in?

- Review the fracture-type reference: greenstick, transverse, comminuted, and spiral.
- Examine the provided X-ray set or fracture model and classify each break.
- Identify the joint nearest each fracture and its type (hinge, ball-and-socket, pivot).
- Record which fracture would likely heal fastest and why.
- Submit your fracture classification table with joint notes.

Evidence: Data table - Fracture classification table: each image labeled with fracture type, nearest joint type, and predicted healing speed with justification.

My notes, examples, and questions

Checks for understanding How do I know I got it?

- You can classify common fracture types from an image.
- You can identify joint types near an injury.

My notes, examples, and questions

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Lab or safety notes
What must I handle carefully?

Safety:

- If handling physical bone models, inspect for sharp edges and wear gloves if directed by the teacher.
- Digital X-ray sets require no additional PPE but treat images with patient dignity.

Supplies:

- X-ray image set (printed or displayed digitally) or fracture model
- Fracture-type reference card
- Ruler (for measuring fracture orientation on printed images, optional)
- Lab notebook or printed data table template

My notes, examples, and questions

Summary

Today's lesson focused on Fracture analysis lab. The main target was: Analyze fracture types and joint movement using imaging or model data. The evidence of learning is Data table: Fracture classification table: each image labeled with fracture type, nearest joint type, and predicted healing speed with justification.. In my own words, the most important idea from today is:

My summary

My final question or connection