Cornell Guided Notes

Human Anatomy & Physiology (Human Body Systems) | 2027-04-28

Name	Period	Date	Lesson
		2027-04-28	

Lesson focus

Spirometry data CER analysis

Key words and questions	Prepared details and student notes
Essential question **What is today's target?**	Students will analyze spirometry data and write a CER about respiratory function. Big idea: Comparing measured lung volumes to predicted values reveals whether the respiratory system is functioning within a healthy range. **My notes, examples, and questions**
Key words **What vocabulary unlocks the lesson?**	- alveolus - gas exchange - tidal volume - vital capacity - spirometry - oxygen saturation **My notes, examples, and questions**

Cornell Guided Notes

Human Anatomy & Physiology (Human Body Systems) | 2027-04-28

Cornell Notes - Continued

Key words and questions	Prepared details and student notes
Must-know ideas **What should I understand by the end?**	- A measured vital capacity significantly below predicted may suggest restrictive or obstructive lung disease. - Factors that reduce vital capacity include height, age, smoking history, and chronic lung conditions. - CER reasoning must connect the measured deviation (or match) to the underlying alveolar or airway mechanism. **My notes, examples, and questions**
Process notes **What happens during class?**	- 0-10: Review predicted reference ranges; annotate your data table with above/below status - 10-25: Identify the most meaningful comparison in your data; decide on a specific claim - 25-45: Write full CER: claim, two measured-value evidence entries, reasoning linking structure to capacity - 45-58: Add one factor that could affect vital capacity and explain the mechanism - 58-70: Peer review: check that reasoning names an alveolar or airway mechanism - 70-80: Revise and submit CER **My notes, examples, and questions**

Cornell Guided Notes

Human Anatomy & Physiology (Human Body Systems) | 2027-04-28

Cornell Notes - Continued

Key words and questions	Prepared details and student notes
Steps and evidence **What do I do and turn in?**	- Compare your lung volumes to predicted ranges. - Make a claim about your respiratory capacity. - Cite two measurements as evidence. - Add reasoning linking alveolar surface area to capacity. - Note one factor that could affect vital capacity. Evidence: CER - Written CER analyzing spirometry data: claim about respiratory capacity, two specific measurement evidence entries compared to predicted values, reasoning linking alveolar structure to capacity, and one factor affecting vital capacity. **My notes, examples, and questions**
Checks for understanding **How do I know I got it?**	- CER includes claim, evidence, and reasoning. - Data is compared to predicted reference values. **My notes, examples, and questions**

Cornell Guided Notes

Human Anatomy & Physiology (Human Body Systems) | 2027-04-28

Cornell Notes - Continued

Key words and questions	Prepared details and student notes

Lab or safety notes
What must I handle carefully?

Supplies:
- Spirometer or spirometry sensor
- Disposable mouthpieces
- Respiratory system diagram
- Pulse oximeter
- Data table for lung volumes
- Lab notebook

My notes, examples, and questions

Summary

Today's lesson focused on Spirometry data CER analysis. The main target was: Students will analyze spirometry data and write a CER about respiratory function. The evidence of learning is CER: Written CER analyzing spirometry data: claim about respiratory capacity, two specific measurement evidence entries compared to predicted values, reasoning linking alveolar structure to capacity, and one factor affecting vital capacity.. In my own words, the most important idea from today is:

My summary

My final question or connection