

# Cornell Guided Notes

Principles of Biomedical Technology (Principles of Biomedical Science) | 2026-10-01

Name

Period

Date

Lesson

## Lesson focus

Vital signs practical

## Key words and questions

## Prepared details and student notes

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

Collect vital signs following an SOP and record them accurately in a simulated EMR. Big idea: Accurate vital-sign documentation requires SOP compliance and proper technique; a single documentation error in a clinical record can lead to incorrect treatment decisions.

**My notes, examples, and questions**

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

- chief complaint
- symptom
- vital sign
- pulse
- blood pressure
- respiration
- HIPAA
- homeostasis

**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?**

- Pulse is measured by palpating the radial artery with two fingers for 60 seconds (or 30 seconds x 2); the thumb has its own pulse and must not be used.
- Respiration rate is counted for 30-60 seconds without telling the patient, because awareness of breathing changes its rate.
- Blood pressure cuff size matters: an incorrectly sized cuff produces inaccurate readings; the bladder should encircle at least 80% of the upper arm.

**My notes, examples, and questions**

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

- 0:00: Demonstrate vital-sign technique for each of the four measures; class observes correct hand placement and timer use
- 0:15: Partner practice: collect all four vital signs following the SOP; record each in the simulated EMR template
- 0:45: Repeat one vital sign measurement; record both values; note the difference and whether it is within acceptable range
- 1:00: Record one limitation and one technique-based error source for each measurement in the notebook
- 1:10: Review a few EMR entries as a class; identify common documentation errors; preview Thursday analysis

**My notes, examples, and questions**

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## Cornell Notes - Continued

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

- Read the vital-signs SOP and gather the measurement tools.
- Measure pulse, respiration, temperature, and blood pressure on a partner.
- Record each reading with correct units in the simulated EMR.
- Repeat one measurement to check precision and note any difference.
- Record one limitation and one error source for each technique.

Evidence: Data table - Simulated EMR record: all four vital signs with values, units, and normal range noted; one repeat measurement with both values compared; one limitation and one error source per technique.

#### My notes, examples, and questions

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

- I can collect vital signs following an SOP.
- I can record readings with correct units in an EMR.

#### My notes, examples, and questions

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

#### Safety:

- Sanitize thermometer probes with alcohol wipes between every student; do not share uncleaned thermometers.
- Sanitize stethoscope ear pieces with alcohol wipes before each use; allow 30 seconds to dry before inserting.
- Blood pressure cuffs should not be inflated above 180 mmHg; release pressure immediately if a partner reports discomfort or numbness.
- Students with known circulatory conditions should inform the teacher before the blood pressure station; an alternative measurement activity can be substituted.
- Wash hands before and after any partner-contact measurement activity.

#### Supplies:

- Digital or analog thermometers (oral or temporal; one per student pair)
- Stopwatches or phones for timing pulse and respiration
- Blood pressure cuffs (multiple sizes: pediatric, adult, large adult) with sphygmomanometers or digital monitors
- Stethoscopes (if using manual blood pressure cuffs; one per pair)
- Alcohol prep wipes for sanitizing thermometer tips and stethoscope ear pieces between uses
- Simulated EMR template (printed or digital form)
- Lab notebooks

#### My notes, examples, and questions

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## Cornell Notes - Continued

### Summary

Today's lesson focused on Vital signs practical. The main target was: Collect vital signs following an SOP and record them accurately in a simulated EMR. The evidence of learning is Data table: Simulated EMR record: all four vital signs with values, units, and normal range noted; one repeat measurement with both values compared; one limitation and one error source per technique.. In my own words, the most important idea from today is:

**My summary**

**My final question or connection**