Berea MS Lesson Plan 2025 - 2026 **Week :** 8/25 - 8/29 **Teacher**: Jeffreys **Grade/Subject:** GTT8 Medical Detectives

Unit Title:	Lesson 1: Disease Detectives
Unit Vocabulary:	Vital signs – Measurements of the body's basic functions. Pulse – The rhythmic beat of the heart felt through the arteries. Respiratory rate – The number of breaths taken per minute. Blood pressure – The force of blood pushing against artery walls. Systolic pressure – The pressure in arteries when the heart beats. Diastolic pressure – The pressure in arteries when the heart rests between beats. Temperature – A measure of body heat. Homeostasis – The body's ability to maintain stable internal conditions. Diagnosis – The identification of a disease or condition based on symptoms and tests. Hydration – The state of having adequate water in the body. Dehydration – A condition caused by excessive loss of body water. Hypertension – Abnormally high blood pressure. Hypotension – Abnormally low blood pressure. Beats per minute (BPM) – The unit for measuring heart rate. Baseline – The normal value for a measurement. Outlier – A data point that differs greatly from other observations. Correlation – A relationship or connection between two variables. Prognosis – The predicted outcome of an illness. Clinical reasoning – The process of analyzing patient data to make decisions. Evidence-based conclusion – A decision or judgment supported by data and facts.

Upcoming Common Assessments (MasteryConnect):	None

	Standard(s) + Learning Objective	Activating Experience (Opening, may include "Scholar Starter")	Learning Experience (Work Time: SB Materials and Resources, Vocab, Scaffolds/Supports, SWRL, Costas)	Formative or Summative Assessment(s)	Summarizing Experience (Closing)	WICOR, AVID and/or ELLevation Strategies (aligned with learning objective)
MONDAY	**Standard** (write out)**:** Obtain, evaluate, and communicate information about the human body systems and how they interact to maintain homeostasis. **Learning Objective** **Skill (what), Content (why), Product (how): Obtain, evaluate, and communicate information about the human body systems and how they interact to maintain homeostasis.**	Class discussion about past vital sign checks and hydration during physical activity.	Lessons on Vital Signs & Purpose in ER Care **Standards Based Materials & Resources:** PLTW Medical Detectives unit; Vital Signs slideshow; ER scenario text; graphic organizer template; projector. **Content/Academic Vocabulary:** vital signs, pulse, respiratory rate, temperature, blood pressure, homeostasis, diagnosis, hydration. **ILAP/IEP/504 Scaffolds & Supports:** sentence starters for definitions; visuals with labeled diagrams; partner reading; extended time for graphic organizer. **List Opportunities to Speaking Writing Listening LIstening:** Scholars will Speak (partner discussion about personal ER experiences), Write (organizer), Read (ER scenario text), Listen (teacher explanation and peer sharing). **Costa's Levels of Thinking/Questioning:** **Level 1:** What are the four main vital signs? **Level 2:** How do vital signs help doctors make quick decisions? **Level 3:** Why might vital signs be more important in certain medical situations?	Completion and accuracy of visual organizer.	scholars share one way vital signs could save a life in an emergency.	*Organizing* — Using a structured graphic organizer to categorize medical data.

TUESDAY	**Standard** (write out)**:** Analyze and interpret data to explain how the body responds to physical activity and environmental changes. **Learning Objective** **Skill (what), Content (why), Product (how):Measure pulse and temperature accurately. Content — Understand how these vital signs reflect health status. Product — Record and compare personal and peer data in PLTW Gateway Notebook.**	Review Monday's organizer and predict how activity might change pulse/temperature.	Measuring Pulse & Temperature Demonstration of pulse and temperature measurement; partner practice; data recording. **Standards Based Materials & Resources:** Thermometers; stopwatches; pulse measurement guide; PLTW Temperature slideshow; thermometer reading practice questions. **Content/Academic Vocabulary:** pulse rate, beats per minute, thermometer, temperature reading, Celsius, Fahrenheit. **ILAP/IEP/504 Scaffolds & Supports:** step-by-step illustrated instructions; modeling before practice; peer pairing for support. **Opportunities to SWRL:** *Speak* (partner discussion of results), *Write* (record data), *Read* (procedure slideshow), *Listen* (partner instructions). **Costa's Levels of Thinking/Questioning:** **Level 1:** How do you measure pulse? **Level 2:** How might pulse change after exercise? **Level 3**:Why could temperature readings vary depending on the method used?	Accuracy of recorded data; thermometer practice question responses.	scholars share one factor that could cause their pulse or temperature to change.	*Inquiry* — Predicting and testing hypotheses about body changes.

W E D N E S D A Y	**Standard** (write out)**:** **Learning Objective** **Skill (what), Content (why), Product (how):Skill — Measure respiratory rate and blood pressure. Content — Understand what these vital signs indicate about cardiovascular and respiratory health. Product — Record and analyze results in PLTW Gateway Notebook.**	Ask scholars if they've seen someone have their BP taken; discuss possible outcomes of too high/low BP.	Measuring Respiratory Rate & Blood Pressure Demonstration; scholar pairs rotate through respiratory and BP stations; record results. **Standards Based Materials & Resources:** Blood pressure cuffs; respiratory rate stopwatch; PLTW procedure slideshows; troubleshooting guide for BP monitors. **Content/Academic Vocabulary:** respiratory rate, breaths per minute, systolic pressure, diastolic pressure, hypertension, hypotension. **ILAP/IEP/504 Scaffolds & Supports:** BP cuff fitting assistance; printed BP troubleshooting guide; simplified vocabulary list **Opportunities to SWRL:** *Speak* (explain BP reading to partner), *Write* (record data), *Read* (procedure steps), *Listen* (demonstration). **Costa's Levels of Thinking/Questioning:** **Level 1:** How do you measure blood pressure? **Level 2:** Why might the respiratory rate increase suddenly? **Level 3:How could incorrect cuff placement affect BP readings?**	Correct use of equipment; accurate data entry.	Exit ticket — "One thing I learned about respiratory or BP measurement today is…"	*Collaboration* — Partnering to ensure accurate measurement and recording.

THURSDAY	**Standard** (write out)**:** **Learning Objective** **Skill (what), Content (why), Product (how):*Skill* — Analyze vital sign data for patterns. *Content* — Determine how body systems respond to activity and hydration. *Product* — Data analysis chart and short written explanation.**	Quick review of all vital signs; scholars guess possible trends in class data.	Analyzing and Comparing Vital Sign Data scholars analyze their own and class data for trends; compared to medical norms. **Standards Based Materials & Resources:** scholars' recorded data from Tue/Wed; analysis chart template; graphing tools; example patient case files. **Content/Academic Vocabulary:** data analysis, baseline, outlier, pattern, correlation. **ILAP/IEP/504 Scaffolds & Supports:** partially completed chart; graph templates; small group analysis with teacher. **Opportunities to SWRL:** *Speak* (share data patterns), *Write* (explanation of findings), *Read* (case file examples), *Listen* (peer analysis). **Costa's Levels of Thinking/Questioning:** **Level 1:** What is the average pulse rate for your group? **Level 2:** How do your results compare before and after activity? **Level 3:**What factors might explain unexpected results?	Completed analysis chart; peer discussion.	scholars share one pattern and one possible cause.	*Writing to Learn* — Organizing and explaining data findings.

F R I D A Y	**Standard** (write out)**:** **Learning Objective** **Skill (what), Content (why), Product (how):*Skill* — Draw conclusions from vital sign evidence. *Content* — Apply medical reasoning to hypothetical patient scenarios. *Product* — Written case analysis report.**	The teacher presents a short ER mystery case; scholars predict possible diagnoses.	Drawing Conclusions & Applying Vital Sign Knowledge scholars work in pairs to analyze provided patient vital sign data and write conclusions. **Standards Based Materials & Resources:** Patient case scenarios; rubric for case analysis; PLTW Gateway Notebooks; reference charts for normal ranges. **Content/Academic Vocabulary:** diagnosis, prognosis, clinical reasoning, evidence-based conclusion. **ILAP/IEP/504 Scaffolds & Supports:** sentence frames for case reports; vocabulary banks; oral presentation option. **Opportunities to SWRL:** *Speak* (present case findings), *Write* (case analysis), *Read* (patient files), *Listen* (peer presentations). **Costa's Levels of Thinking/Questioning:** **Level 1:** What was the patient's pulse rate? **Level 2:** How does this rate compare to normal ranges? **Level 3:** What is your evidence-based conclusion about the patient's condition?		Summative Assessment: Completed patient case analysis report (graded with rubric). Summarizing Experience: Reflection — "One way I can use what I learned about vital signs in real life is…"	*Inquiry + Collaboration* — Working together to apply questioning and reasoning to real-world cases.