Medical Detectives

(Updated May 2020)

ELOs

Lesson 1:

- 1. Students can collect and interpret vital signs to evaluate patient health.
- 2. Students can identify and treat infectious disease agents.
- 3. Students can design and conduct experiments to test the effectiveness of antibiotics on bacteria.
- 4. Students can analyze medical data to diagnose and treat patients with a mystery illness through questioning and deductive reasoning.

Lesson 2:

- 5. Students can investigate how the nervous system collects and processes information and initiates the body's response.
- 6. Students can create neuron models and perform sheep brain dissection.
- 7. Students can analyze evidence to identify nervous system dysfunctions and create educational resources to help their patient understand the medical condition that is linked to a brain tumor or brain disorder due to damage in the nervous system.

Lesson 3:

- 8. Describe how a suspected toxin has impacted the health of a patient.
- 9. Analyze patient symptoms and perform lab analyses of patient samples to identify the culprit and determine how the toxin is spreading.
- 10. Locate the source of the toxin using a map of the community, patient histories, and lab data, and present findings to help community leaders mitigate the situation.

Essential Questions

- 1. What can patient signs and symptoms tell us about what's happening in the human body?
- 2. How do medical detectives investigate their cases?
- 3. What does effective teamwork look like?
- 4. How does the nervous system allow our bodies to interact with the outside world?