Become medical detectives and solve medical mysteries!

Apply experimental design, creative thinking, and problem solving to investigate the inner-workings of the human body, diagnose disease, and improve human health.

In the new Medical Detectives unit, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

New Medical Detectives Lesson Summary

Lesson 1 Disease Detectives
Lesson 2 Mysteries of the Human Body
Lesson 3 Outbreak!

Lesson 1: Disease Detectives

Students discover how healthcare professionals act as medical detectives to identify, treat, and prevent illness in their patients. Students collect and interpret vital signs to evaluate patient health, explore different infectious disease agents, and design and conduct experiments to test the effectiveness of antibiotics on bacteria. In the end-of-lesson project, students collect and analyze medical data to diagnose a patient with a mystery illness.

Lesson 2: Mysteries of the Human Body

This lesson introduces the human body as a collection of body systems, with a focus on the nervous system. Students investigate how the nervous system collects information from the outside world, moves this information through neurons, processes this information in the brain, and initiates the body's response accordingly. Students create neuron models and perform a sheep brain dissection. They use their knowledge to explore symptoms as they relate to specific nervous system dysfunction and analyze evidence to identify the cause of the dysfunction. In the end-of-lesson project, students create educational resources to help their patient understand the medical condition.

Lesson 3: Outbreak!

A mysterious toxin is endangering the health of a community. Using their understandings of human body systems, students describe how the suspected toxin has impacted the health of the patient. Students analyze patient symptoms and perform lab analyses of patient samples to identify the culprit and determine how it's spreading. In the end-of-unit problem, students locate the source of the toxin using a map of the community, patient histories, and lab data, then present their findings to help community leaders mitigate the situation.