

## 7th-8th Grade Project Lead the Way Medical Detectives Pacing Guide (Semester Course)

### What is a Medical Detective (4 weeks)

<b>Priority Standard</b>	<b>T1 (MD1)</b>	<b>Assert their rights as a patient; be able to identify if they are being treated fairly and ethically.</b>
	<b>T2 (MD2)</b>	<b>Explain the benefits of healthy living behaviors.</b>
	<b>T3 (MD3)</b>	<b>Diagnose an illness using the principles and practices of a medical professional.</b>
<b>Supporting Standards</b>	K1 (MD-1)	Describe the spread of a viral illness after inoculation is introduced.
	K2 (MD-2)	Describe the steps that a medical professional will take to diagnose and treat a patient.
	S1 (MD-3)	Measure vital signs including heart rate, blood pressure, and temperature.
	S2 (MD-4)	Demonstrate the use of technology as an important tool in the biomedical sciences.
	S3 (MD-5)	Explain the different ways a virus spreads through a population.
	S4 (MD-6)	Evaluate patient case files to diagnose the pathogen responsible for the patient's mystery illness.
	S5 (MD-7)	Provide examples of how medical professionals contribute to the health and wellness of individuals

### Mysteries of the Human Body Systems (6 weeks)

<b>Priority Standard</b>	<b>K1 (HBS1)</b>	<b>Design and conduct experiments (dissections), then analyze and interpret the data to make a medical diagnosis</b>
<b>Supporting Standards</b>	K1 (HBS-1)	Describe how the brain collects and interprets input.
	K2 (HBS-2)	Identify major regions of the human brain.
	S1 (HBS-3)	Compare and contrast the senses of hearing and sight, taste and smell, and describe how they are collected and processed by the human body.
	S2 (HBS-4)	Dissect a sheep's brain, accurately identifying and describing the function of the specified structures.
	S3 (HBS-5)	Compare and contrast the brains of a human and sheep.
	S4 (HBS-6)	Evaluate patient family history as part of a medical exam and create a pedigree.
	S5 (HBS-7)	Determine the probability of a child inheriting a genetic disease.
	S6 (HBS-8)	Use appropriate laboratory methods to isolate DNA from cheek cells.
	S7 (HBS-9)	Analyze how changes in the huntingtin gene affect the resulting protein and nerve cell function.

### Murder Mystery (7 weeks)

<b>Priority Standard</b>	<b>T1 (MM1)</b>	<b>Design and conduct experiments, as well as analyze and interpret data, to determine cause and time of death.</b>
<b>Supporting Standards</b>	K1 (MM-1)	List the steps of an autopsy.
	S1 (MM-2)	Know how to use patient and ambient temperature to identify the time of death.
	S2 (MM-3)	Know how to use the time of death information to identify suspects.
	S3 (MM-4)	Analyze a portion of an autopsy report to determine the cause of death for a murder victim.