

Unit 6: Forensic Entomology

Content Area: **Science**
Course(s):
Time Period: **Generic Time Period**
Length: **2 weeks**
Status: **Published**

Unit Introduction

This unit will focus on the use of insects to determine time of death in Forensic Science

Standards

SCI.9-12.HS-ETS1-4.4.1	Models (e.g., physical, mathematical, computer models) can be used to simulate systems and interactions— including energy, matter, and information flows— within and between systems at different scales.
SCI.9-12.HS-LS1-1.6.1	students investigate systems by examining the properties of different materials, the structures of different components, and their interconnections to reveal the system’s function and/or solve a problem. They infer the functions and properties of natural and designed objects and systems from their overall structure, the way their components are shaped and used, and the molecular substructures of their various materials.
SCI.9-12.HS-PS1-1.1.1	students observe patterns in systems at different scales and cite patterns as empirical evidence for causality in supporting their explanations of phenomena. They recognize classifications or explanations used at one scale may not be useful or need revision using a different scale; thus requiring improved investigations and experiments. They use mathematical representations to identify certain patterns and analyze patterns of performance in order to reengineer and improve a designed system.
SCI.9-12.HS-PS2-3.2.1	Systems can be designed to cause a desired effect.
SCI.9-12.HS-PS1-4.5.1	Changes of energy and matter in a system can be described in terms of energy and matter flows into, out of, and within that system.
SCI.9-12.HS-PS1-7.5.1	students learn that the total amount of energy and matter in closed systems is conserved. They can describe changes of energy and matter in a system in terms of energy and matter flows into, out of, and within that system. They also learn that energy cannot be created or destroyed. It only moves between one place and another place, between objects and/or fields, or between systems. Energy drives the cycling of matter within and between systems. In nuclear processes, atoms are not conserved, but the total number of protons plus neutrons is conserved.

Essential Questions

How can insects be a useful tool in Forensic Science?

Content / Skills

Content

- Examine the life cycle of a blow fly
- Determine the stage of life of an insect
- Explain the importance of weather in time of death

Skills

- Microscope analysis of blow fly stage of life
- Estimate time of death
- Identify human remains based on presense of insects