

High School Science Virtual Learning

Forensic Science Intro to Time of Death April 17, 2020



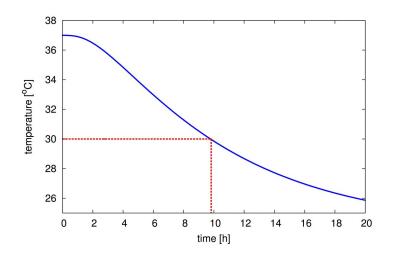
High School Forensic Science Lesson: Friday, April 17

Objective/Learning Target:

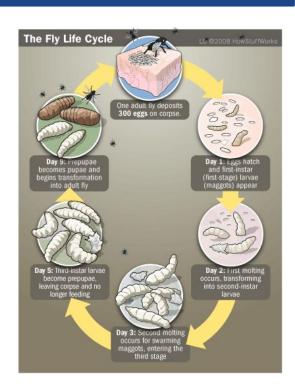
Students will be able to identify the ways a forensics team determines time of death.



1. The graph on the right shows you the correlation between what 2 factors?



2. How can insect activity help decide time of death?





1. Temperature and time since death

2. Insects behave and develop in a predictable way.



Lesson Activity:

Directions:

- 1. Watch the video one time all the way through to listen and take in the information.
- 2. Watch the video a second time and answer the following questions:
 - a. What are the 4 techniques used to narrow down time of death?
 - b. Which technique has to do with muscle contraction?

Link(s): Rigor Mortis, Livor Mortis, Pallor Mortis, Algor Mortis: Forensic Science Explains Stages of Death



Answer Key

Once you have completed the lesson activity check with the work.

- 1. Rigor Mortis, Livor Mortis, Pallor Mortis, Algor Mortis
- 2. Rigor Mortis



Practice

You will use the information from the activity on slide 5 to answer the following questions.



Practice Questions

- 1. What is pallor mortis?
- 2. What is algor mortis?
- 3. What is rigor mortis?
- 4. What is livor mortis?
- 5. When do the two stages of flaccidity happen?



Answer Key

Once you have completed the practice questions check with the work.

- 1. The paling of the skin that happens 15-30 minutes after death.
- 2. The consistent decrease in core body temperature after all body functions have stopped. This is not an accurate what to calculate time of death though because the decrease in body temperature will vary depending on external conditions.
- 3. Stiff death. This is the first stage of muscle breakdown. Cells start to breakdown and there is no energy to release the contraction. Reaching its peak 12 hours after death.
- 4. After death the blood pools in the direction of gravity. This is visible after 2 hours and is fixed after 6 hours.
- 5. 1. Before rigor mortis it lasts for 1-2 hours after death. 2. After 12 hours when the muscles are broken down to the point where the contracting proteins have lost their structure.



More Practice

You will use the information from the activity on slide 5 to answer the following questions.



More Practice Questions

Click on the following link for more practice over time of death. Once you open the link then you need to enable flash player in settings to be able to do the interactive.

- Interactive: Determine the Time of Death
- 2. http://www.exploreforensics.co.uk/estimating-the-time-of-death.html



Additional Practice

1. <a href="https://www.forensicscolleges.com/blog/resources/how-to-determine-time-of-determine-time-o