

Name _____ Class _____ Date _____

Forensic Entomology
Murder Investigation #1

Crime Report

Police Report: Body of a female was found in an alley behind the dumpsters in a major U.S. city. No apparent wounds were observed on the body.

Weather Report: Daytime temperatures have been fairly consistent for the past 3 weeks ranging from 70 - 74 °F.

Answer the following questions.

1. Approximately how long has this person been dead?
2. Why are maggots of different ages found in the body?
3. Besides temperature, what abiotic conditions would you want to obtain from the weather stations to help you to be more confident of your estimation above?

Forensic Entomology

Murder Investigation #2

Crime Report

Police Report: Body of a young male was found inside an apartment in a major U.S. city. Maggots were found concentrated in the head and chest region. The windows were closed, although the open curtains allowed sunlight to enter, and the air conditioner was set to 72 °F.

Weather Report: Daytime temperatures have been variable over the past 3 weeks ranging from 75 - 94 °F. Skies have been sunny.

Answer the following questions.

1. Approximately how long has this person been dead?
2. What effect, if any, does the outside temperature have on your estimation of time of death?
3. How does the fact that the windows were closed relate to the populations of flies you observed in and around the corpse? (i.e., is there something different about this population than the population in investigation #1). How do you explain the absence of *Calliphora vomitoria*?
4. Do you suspect foul play? Explain.

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Forensic Entomology
Murder Investigation #3

Crime Report

Police Report: Body of a young male was found in a field near a small, rural town. The autopsy report reveals that cocaine was present in the body.

Weather Report: Daytime temperatures have been unusually warm over the past 3 weeks ranging from 84 - 86 °F.

Answer the following questions.

1. Approximately how long has this person been dead?
2. What effect, if any, does the temperature have on your estimation of time of death? Explain how you used this information in determining the post-mortem interval.
3. What effect, if any, does the temperature have on your estimation of time of death? Explain how you used this information in determining the post-mortem interval.
4. Does the location of the body, coupled with the insects recovered from it, suggest foul play or not, or can you tell from the information given? Explain.

Forensic Entomology

Murder Investigation #4

Crime Report

Police Report: Body of an old female was found in a dense, evergreen forest far away from any urban area.

Weather Report: Daytime temperatures have been average over the past 3 weeks ranging from 70 - 73 °F. Temperatures in the woods would be approximately 5 ° cooler due to the lack of sun in the shady environment.

Answer the following questions.

1. Approximately how long has this person been dead?
2. What effect, if any, does the temperature have on your estimation of time of death?
3. Does the location of the body, coupled with the insects recovered from it, suggest foul play or not, or can you tell from the information given? Explain.