

Forensic Entomology

Name _____

Part A: Complete the notes as you review the information in class.



1. Forensic _____ apply their knowledge of entomology to provide information for criminal investigations, which may include:

- Identification of insects at various stages of their _____, such as eggs, larva, pupa, and adults.
- _____ and _____ of insects used as evidence.
- Determining an estimate for the _____ or PMI, which is the time between death and the discovery of the body.
- _____ in court to explain insect-related evidence found at a crime scene.

2. Besides insect evidence, what other factors are useful in estimating the PMI?

Weather Data	
Species Succession	
Other Factors	

3. What does ectothermic mean? How does it relate to forensic entomology? _____

4. Which orders of insects are most used as evidence? Give two examples of each.

_____ - _____

_____ - _____

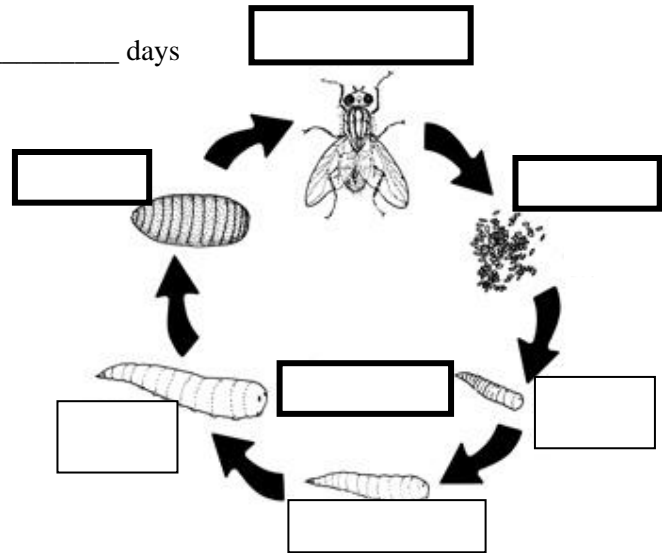
5. What type of metamorphosis do true flies and beetles have? _____

6. Label the diagram of the blow fly life cycle and then answer the questions.

A. How long does it take to complete at 70°F? _____ days

B. What is molting? _____

C. What information do scientists need to determine the age of a larva? _____

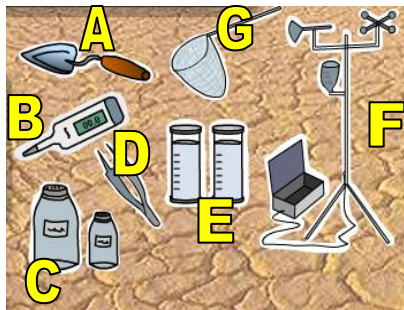


7. True or False? All fly species will have the same timeline as long as the temperature is the same.

Crime Scene Creatures - Follow the teacher's directions to complete the online activity.

#1 - What is the crime? _____

#2 - Identify each tool by letter and then draw a line to connect it to its function.



- ___ Forceps
- ___ Ventilated jars
- ___ Thermometer
- ___ Hand net
- ___ Trowel
- ___ Specimen Jars
- ___ Weather Station

- Used to dig up soil samples
- Used to store live species
- Used to collect crawling insects
- Used to collect flying insects
- Used to collect & preserve specimens
- Used to collect weather data
- Used to take temperatures (air, soil, masses)

#3 - Which specimens did you take back to the lab? Circle the five that you chose.

- | | | |
|---------------|------------------|----------------------|
| Scorpion | Small Maggots | Spider |
| Beetle | Empty Pupa Cases | Fly Eggs |
| Large Maggots | Adult Fly | Fly (Crumpled Wings) |

#4 - What was the correct PMI? _____

#5 - Which two specimens were most helpful in finding the correct answer? _____