

SI Forensics - Full Discipline Demo

Autopsy

Final Report - Answer Guide

Institution	Science Interactive University
Session	SI Forensics - Full Discipline Demo
Course	SI Forensics - Full Discipline Demo
Instructor	Sales SI Demo

Test Your Knowledge

Classify each statement as referring to cause of death or manner of death.

⚡ Describes the specific injury or disease that lead to the decedent's death.	
⚡ Describes how the injury or disease that lead to the individual's death occurred.	
⚡ Categories include natural, accident, homicide, suicide, or undetermined.	
Cause of Death	Manner of Death
1	2

Correct answers:

1 Describes the specific injury or disease that lead to the decedent's death.

2
Describes how the injury or disease that lead to the individual's death occurred.
Categories include natural, accident, homicide, suicide, or undetermined.

Classify each statement as part of the external examination or internal examination portion of an autopsy.

⚡ Removal of abdominal fluid.	
⚡ Organs are removed, weighed, examined, and sometimes preserved for later dissection.	
⚡ Documentation of abnormalities on a body diagram.	
⚡ The skin, eyes, and mouth are examined for any abnormalities or obvious external wounds.	
⚡ All of the organs are removed as one unit, called the body block.	
⚡ Examination of lividity.	⚡ Organs are examined in place.
External Examination 1 Internal Examination 2	

Correct answers:

1 Examination of lividity.

The skin, eyes, and mouth are examined for any abnormalities or obvious external wounds.

Documentation of abnormalities on a body diagram.

2 Removal of abdominal fluid.

Organs are removed, weighed, examined, and sometimes preserved for later dissection.

All of the organs are removed as one unit, called the body block.

Organs are examined in place.

Place the stages of decomposition in order with the earliest stage at the top and the latest stage at the bottom.

≡ Livor mortis	1	Correct answer: Livor mortis
≡ Muscle relaxation	2	Correct answer: Rigor mortis
≡ Skeletonization	3	Correct answer: Muscle relaxation
≡ Putrefaction	4	Correct answer: Putrefaction
≡ Rigor mortis	5	Correct answer: Skeletonization

Exploration

The injury or disease that led to the decedent's death is listed as the cause of death.

☒ True	✓
☐ False	

Livor mortis results in a color change in the body parts closest to the ground during death that is observed during the external examination.

☒ True	✓
☐ False	

The _____ are removed as one unit, called the body block.

- ☐ ribs
- ☒ organs ✓
- ☐ body fluids
- ☐ brain

Muscles lock into a state called _____ for approximately 12 - 48 hours after death.

- ☐ putrefaction
- ☐ skeletonization
- ☒ rigor mortis ✓
- ☐ livor mortis

Exercise 1

Based on the condition of the body, approximately how long has it most likely been since the individual died? Use your knowledge of the processes the body goes through after death to support your answer.

What results of the autopsy supported the determined cause and manner of death?

Why was an autopsy conducted on this individual? In what other circumstances would a forensics autopsy be ordered?

Data Table 1: Autopsy Report
(SAMPLE ANSWER BELOW)

Pathologist Name	Student Name	Date	Date student performs exercise
Age	61	Body Length	67 inches
Sex	Male	Race	Caucasian/White
Eyes	No abnormalities observed	Hair	White
Lividity (Location, Color)	Lividity is along the decedent's back.		
Distinguishing Features			
Left Kidney	Weighs 240 g, appears healthy		
Right Kidney	Weighs 230 g, appears healthy		
Bladder	Appears healthy		
Prostate	Benign nodule approximately 1.5 cm in diameter		
Stomach	Damaged blood vessels in the stomach lining, contents mostly blood.		
Spleen	Appears healthy		
Pancreas	Appears healthy		
Liver	Severe cirrhosis		
Heart	Weighs 540 g, Small circular scar on the posterior apex		
Left Lung	Weighs 690 g, appears healthy		
Right Lung	Weighs 870 g, appears healthy		
Larynx	Appears healthy		
Brain	Weighs 1410g, appears healthy		
Cause of Death	Cirrhosis of the liver		
Manner of Death	Natural		

Competency Review

An autopsy is used to determine the cause of death, and the crime scene investigation is used to determine the manner of death.

- ☐ True
- ☒ False

Which of the following is NOT a manner of death?

- ☐ Homicide
- ☐ Suicide
- ☒ Suspicious
- ☐ Natural

_____ can be indicative that a body has been moved if the pools of blood in the skin are in a place where pools of blood could not have formed due to gravity.

- ☒ Livor mortis
- ☐ Rigor mortis
- ☐ The body block
- ☐ The Y incision

The internal examination begins with a Y-shaped incision.

- ☒ True
- ☐ False

Muscles relax out of rigor mortis approximately _____ after death.

- ☐ 30 minutes
- ☐ 6 hours
- ☐ 12 hours
- ☒ 48 hours

During an autopsy, only observations directly relevant to the potential cause of death are noted on the autopsy form.

☐ True

☐ False

✓

Damaged blood vessels in the stomach lining result in an effect referred to as _____.

☐ watermelon stomach

☐ bread loafing

☐ strawberry lining

☐ cirrhosis of the stomach

✓

The manner of death of the decedent in Exercise 1 was natural.

☐ True

☐ False

✓

Extension Questions

Though cause of death can typically be determined immediately after conclusion of the autopsy, manner of death often takes months to determine. Why is this the case? (SAMPLE ANSWER BELOW)

Because manner of death often requires information from both the autopsy and the criminal investigation, it may not be determined until the criminal investigation is completed. For example, in the instance where the cause of death is injuries sustained due to a fall from a great height, the medical examiner alone may not be able to conclude if the fall was an accident, a homicide, or a suicide. Determining the manner of death may take months, years, or in some cases may never be determined in which case it is deemed undetermined.