



OHIO CSI FORENSIC DIVISION

UNIT 1 · MEDICAL INVESTIGATION · CASE STATIC

Period 1-2 · Statik Sound, a neighborhood recording studio

FORM NO. CSI-1-D13
CASE NO. JH-26-0831-A
REV. 2026-27
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FOR EDUCATIONAL USE

OHIO CSI FORENSIC DIVISION

DO NOT DISTRIBUTE ANSWER KEYS

DAILY INVESTIGATION PACKET

Sep 28 · Investigation Day 13 of 18

OFFICIAL

THE BRIEFING: WHAT YOU ARE DOING TODAY, AND HOW THE PROS DO IT

SEC 00

Picking up from yesterday: you learned that three independent clocks, one window. When independent estimates agree, confidence is earned, not assumed.

Real autopsies work from the outside in, describe every finding before interpreting it, and read a wound for 'vital response' to tell whether it happened while the person was alive. Today you work the same stations and make the same careful calls.

OBJECTIVE

Today you will run the autopsy stations: document findings on the body diagram, read the organ findings, and put your hands (virtually) on the heart's real anatomy.

Take-home (the ten-year idea): A wound that bled tells you the person was alive when it happened. Vital response is the body time-stamping its own injuries.

CASE FILE UPDATE

SEC 01

Autopsy day. The examiner's findings packet opens, and one more thing: during office inventory, an insulin pen turns up in the studio desk drawer, expired.

An autopsy runs outside-in: external documentation (done yesterday), then systematic internal examination, organ by organ, with every finding described before it is interpreted. Today's packet is the examination record: your job is to read findings the way you read every exhibit: what does it SAY, then what does it MEAN, then what can it NOT mean.

The concept that unlocks today: VITAL RESPONSE. A living body responds to injury: it bleeds into tissue, swells, sends inflammatory cells. A wound inflicted after death shows little bleeding and no tissue reaction. Analogy: only a running engine leaks oil when punctured. So the wound margins carry a time stamp: with vital response, the injury happened in life; without, after death. That one distinction separates 'injured and then died' from 'died and then damaged,' which can separate accident from staging.

The heart station: you cannot judge findings in an organ you have never navigated. The sheep heart simulation walks the real anatomy: four chambers (right atrium, right ventricle, left atrium, left ventricle), the valves between them, the great vessels (the aorta leaving the left ventricle, the pulmonary artery leaving the right), the coronary arteries on the surface that feed the muscle itself. On the glasses station, the Cleveland Clinic anatomy model shows the same structures in three dimensions at the teacher station. What you need for this case is orientation: enough anatomy to read the examiner's findings and know which findings matter.

NEW VOCABULARY (RECORD IN YOUR NOTEBOOK BANK)

SEC 04

TERM	PLAIN-LANGUAGE DEFINITION	ANALOGY TO HOLD ONTO
vital response	signs a wound happened while the person was alive: swelling, bleeding into tissue	only a running engine leaks oil

THE DECISION OF THE DAY

SEC 03

YOUR ROLE

Team E leads; stations rotate.

THE SITUATION

The autopsy findings packet (this pack), the body diagram, the heart simulation, and the glasses station.

THE RULE YOU APPLY

Findings transcribe onto the diagram exactly as written; interpretations go in a separate column; every interpretation cites a finding.

WHAT YOU PRODUCE

Autopsy findings sheet: body diagram annotated, organ findings logged, vital-response calls made with reasons, heart station checkpoint complete.

Claim ceiling. Findings support or weaken causes of death; the manner still waits for the full picture. One organ's finding is a voice, not a verdict.

WHAT THIS UNLOCKS

Tomorrow the microscope: tissue-level findings that explain today's organ-level ones.

PLTW ANCHOR AND INTERACTIVE LAYER

REF

Activities 1.2.4 Histology + 1.2.5 Gross Anatomy of the Heart (referenced by title only; all materials in this file are John Hay original work)

- **Sheep Heart Dissection simulation** mendozabiomed.org/learn/lab-sim/pbs-sheep-heart-dissection
- Portal: Sheep Heart Dissection simulation (station), day page, guided notes; Meta glasses Cleveland Clinic anatomy at the teacher station
- Meta glasses with the Cleveland Clinic anatomy application (teacher station, rotate in pairs), or the portal heart simulation as the open alternative

myPLTW student access is down for technical reasons. When it is restored, this day's PLTW anchor is completed online; until then the portal simulation and these printed materials carry the day.

EVIDENCE RELEASED TODAY

SEC 07

Hand out only the exhibits listed for this day. Everything marked RELEASED DAY N stays restricted until then.

EXHIBIT 015 · Chemistry thread

RELEASED DAY 13

Insulin pen recovered from desk drawer



Follow each illustrated procedure step by step. The full set is in the Lab Manual.

PROCEDURE: WORKING THE AUTOPSY STATIONS**HOW-TO**



Working the autopsy stations

1. Begin with the external exam and document every finding before anything is disturbed.
2. Work outside-in, organ by organ, describing each finding before interpreting it.
3. Write findings (what is SEEN) in one column and interpretations (what it MEANS) in a separate column, never mixed.
4. For every wound, decide vital response: bleeding into the tissue means the injury happened in life.

Safety and honesty: Treat the person as a patient to the end. Every interpretation must cite the finding it rests on.

INVESTIGATION TEAM ASSIGNMENTS

SEC 05

A Scene and Documentation

Photograph diagrams and station work; log references.

B Trace

Cross-check: do any trace findings sit where the diagram now shows injuries?

C Serology and DNA

Cross-check: do serology locations match the injury map?

D Toxicology and Chemistry

E6 to your thread: an expired, unused insulin pen plus Saturday's meter readings plus the panel. Write the mechanism question this raises (do not answer it yet).

E Medical Examiner

Lead transcription. The paint-transfer laceration WITH vital response: what does each half of that finding time-stamp? No defensive wounds: what does that absence say, and what can it not say?

F Records and Timeline

Timeline: enter medically established events; prune the logic tree with E team.

NOTEBOOK PAGES IN USE TODAY

SEC 06

- Body diagram, front and back
- Logic tree pruning notes
- Day 13 Cornell page

DAILY SUBMISSION FORM: AUTOPSY FINDINGS SHEET

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- ☐ Body diagram annotated
- ☐ Organ findings logged
- ☐ Vital-response calls with reasons
- ☐ Heart checkpoint answers

INVESTIGATOR (PERIOD + CODE, NO
NAMES)

TEAM

TIME SUBMITTED