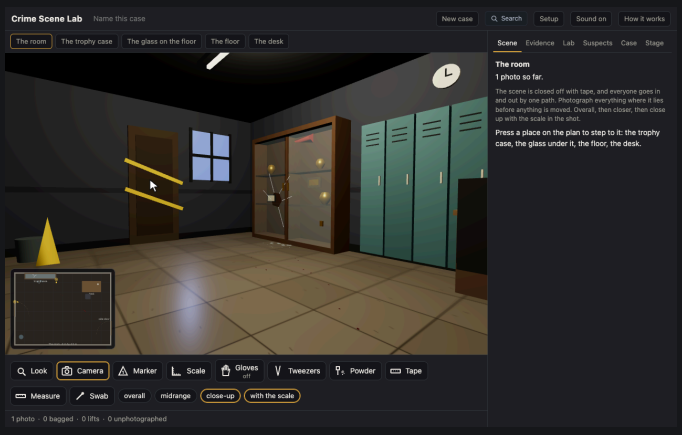
mytekDev

Crime Scene Lab: The Trophy Case, a Crime Scene in One Period

Grades 9-12 · 50 minutes

Forensic science · Biology



Slides, rubric and answer key **Print and go** **No student accounts**

Chromebook friendly

What's included

- A one-page overview: objectives, essential question, vocabulary, standards and assessment
- A 50-minute lesson sequence: warm-up, direct instruction, guided practice, independent practice, closure
- Slides for the board: a PowerPoint file that also opens in Google Slides
- A student worksheet with a QR code and the evidence log to fill in
- A 3-question exit ticket, two to a page, with an answer key
- A rubric: 3 criteria, 4 levels, scored out of 12
- Differentiation for English learners, students with IEPs or 504 plans, and students who need more support or more challenge
- Cross-curricular extensions, and notes for teaching it in grades 6 to 8 and in a college introductory course
- Standards: Common Core ELA

Crime Scene Lab: The Trophy Case, a Crime Scene in One Period

Grades 9-12 · 50 minutes · Forensic science, Biology

Students open a virtual crime scene, a broken trophy case with a trail of drops to the door and a note on the desk, and process it the way a forensics class processes a scene: the whole room photographed first in the dark, then each surface closer, then close-ups with the scale; a numbered marker beside each thing before it is picked up; gloves on; wet evidence in paper. They powder the pane, lift a print and send it to the lab. The app keeps the chain of custody and a log of every mistake, and the worksheet asks them to read it back.

At a glance

ESSENTIAL QUESTION

Why does an investigator photograph everything before touching anything?

OBJECTIVES

Students will be able to:

- process a scene in the right order: photograph overall, midrange and close up with the scale, mark, then collect
- package evidence correctly: a stain air dried and in paper, never plastic, with gloves on
- explain what the chain of custody is and read an item's chain from the log
- say what a mistake at the scene costs, using the app's log line and the evidence chip it leaves

VOCABULARY

Chain of custody, Latent print, Scale, Evidence marker, Lift

STANDARDS

W.9-10.1

TIME AND MATERIALS

50 minutes, grades 9-12.

- One computer or Chromebook per student
- A projector
- The worksheet and exit ticket, one copy each per student
- The rubric, one copy per student if you grade the work

PREP

Make copies of the worksheet and exit ticket. Before class, open mytekdev.com/try/crimescenelab?lesson=the-trophy-case&ref=tpt-crimescenelab-1 once on a student computer: it opens on the dark hallway with nothing touched, and checks that your school's filter allows the app. Work the scene yourself for ten minutes so you know where the pane, the glass, the floor and the desk are.

ASSESSMENT

- Formative: the questions under What to look for, asked while students work, and the exit ticket (answer key included).
- Summative: the worksheet's evidence log and the two questions, scored with the rubric.

TECHNOLOGY AND PRIVACY

Runs in any browser, Chromebooks included, with nothing to install. Students need no account and no email: the link works signed out, and nothing they do is stored on our server unless they choose to save. The case, the people, the prints and the inks are invented.

Lesson sequence

MINUTES	STAGE	WHAT YOU DO	WHAT STUDENTS DO
0 to 6	**Warm-up** Hook	Show the title, essential question and Today I can slides (about 1 minute). Then the warm-up: project the room, dark, on the board. Ask what the first thing to do is. Take four answers and write them on the board; nobody will say the camera.	Answer the warm-up on the worksheet: the first thing you would do, in one line.
6 to 14	**Direct instruction (I do)** Model it	Show the Document before you touch slide, then The order at a scene. Project the app with the starter open. Pick the camera and press anywhere in the dark room: photo 1, the whole room, and the lights come on. Press the trophy case in the room. Camera, close-up, with the scale: press the pane. Marker: press the pane. Then pick the tweezers and press a shard on the glass view before photographing it: read the log line aloud, no photo in place, and the chip it leaves on the Case tab. **It's working when:** The mistake is the point. Make it on purpose on the board so nobody is embarrassed to make it at a desk.	Watch, and fill in the vocabulary on the worksheet.
14 to 24	**Guided practice (We do)** The case together	Have students open the link or scan the QR code. Together: the room photo, the case view, the close-up with the scale, marker 1, gloves on, powder, tape one of the prints that came up, and send the lift from the panel on the right. Check that every student's strip reads 1 lift before moving on. **Watch for:** Students who powder with the gloves off. Four prints come up instead of three; the fourth is their own. Let the app say it.	Do each step in the app as it is called, and write the lift's chain on the worksheet: the order numbers of the photo, the marker, the powder and the tape.
24 to 42	**Independent practice (You do)** The rest of the scene	Students process the glass on the floor, the floor and the desk on their own: photograph, mark, collect, bag in paper, send. Walk the room with the What to look for questions. Do not correct a student who picks up a shard before the photo; the log will. **If they ask:** "Your swab went in a plastic bag. What does the app say will happen to it, and what rule is that?" Why paper?	Process the three remaining views. Fill in the evidence log on the worksheet: every item bagged, its marker, its photos, its bag. Then open the Evidence tab and copy the log line of mistakes.
42 to 50	**Closure** Showcase and exit ticket	Show the Showcase slide. Three students read their log line aloud and say what the scene lost. Hand out the exit ticket.	Answer the exit ticket.

Before you teach: a ten-minute walkthrough

Open mytekdev.com/try/crimescenelab?lesson=the-trophy-case&ref=tpt-crimescenelab-1. A short guide opens over the app in a dark hallway you can turn and zoom: a trophy case on the back wall with a broken pane, glass under it, a trail of drops to the side door under the exit sign, lockers, a desk with a note, tape across the main door.

1. **Photograph first.** `Camera`, then press anywhere in the dark: photo 1, the whole room, and the lights come on. Press the trophy case to step up to it. `Camera` with `close-up` and `with the scale`, press the pane. The panel on the right reads the pane's state after every step.
2. **Mark, glove, powder, tape.** `Marker` on the pane. `Gloves` on. `Powder` on the pane: three prints come up, two from the hand that pushed the glass and one from the custodian who cleans it. `Tape` on one: lift 1, on a card. `send lift 1 to the lab` in the panel.
3. **Make the mistake.** Press `The glass on the floor`. `Tweezers` on a shard before any photo: the log says no photo in place, the strip counts 1 unphotographed, and the Case tab's chip for that shard carries the words. Now do the next shard the right way.
4. **Print the answer key.** `Setup`, then `Print the answer key`: the true story of this seed, whose prints are where, the pen, the shoe and the blood type. Keep it; it never appears in a student's copy.

> The moment that lands is the fourth print. A student who powders with the gloves off gets four prints instead of three, and the tape can lift the one that is their own.

Background for the teacher

A scene is documented before it is disturbed: the whole room, then each area closer, then each item close up with a scale in the shot so the photo can be measured. A numbered marker goes beside each item before it is collected, so the photo, the log and the bag all carry the same number. The log is the inventory; the chain of custody is the record of every hand the item passed through. These are the procedures in the published guides the app's teaching notes cite, and the app follows them exactly: a photo at close range with the scale is the only one the Lab can measure from.

Wet or biological evidence is air dried and packaged in paper, never plastic. The app plays this as a consequence: a swab in a plastic bag arrives at the lab spoiled. A latent print is the oil and sweat the skin leaves; powder brings it up on a smooth surface, and tape lifts it onto a card. Powder does nothing on paper, and the app says so if a student tries the note.

Common mistakes, each of which the app logs rather than prevents: picking up before photographing; a close-up without the scale; powdering with the gloves off, which adds the student's own print; brushing the powder twice, which smudges the print; a stain swabbed before it was photographed, which leaves nothing to measure.

What to look for

Ask these while students work. A student who has understood the lesson can answer them without help:

- Which of your photos can the lab measure from? What makes it the one?
- Read me the chain of custody of marker 2.
- Four prints came up on the pane. Whose is the fourth, and why is it there?
- Your swab is in plastic. What happens to it, and what should it have gone in?
- What does the strip's last number count, and why does it never hide?

> The last question is the real test: anyone who says the mistakes stay on the record because the teacher reads the log, not a score, has understood why the app never punishes.

Cross-curricular extensions

- Math: measure two markers on the sketch from points A and B with the Measure tool, and check them against the printed answer key.
- Civics: find your state's rules on who may collect evidence at a scene and how long it is kept.
- English: write the chain of custody of one item as a paragraph, in order, with no numbers.
- Computer science: write the steps a program would follow to decide whether an item was photographed before it was picked up, from the app's log.

Vocabulary

Chain of custody	The paper trail that follows each item from the scene to the lab: who marked it, photographed it, bagged it and sent it, in order.
Latent print	A print left by the oil and sweat of the skin, invisible until powder or a chemical brings it up.
Scale	A ruler laid beside an item in the close-up, so the photo can be measured.
Evidence marker	A numbered tent set beside a thing before it is photographed and picked up.
Lift	A powdered print taken off a surface with tape and pressed onto a card.

Differentiation

ENGLISH LEARNERS

- Keep the vocabulary slide up with the five terms and the picture of the pane beside them.
- Pair each learner with a partner for the guided scene; the tools are pictures and the log is short lines.
- Accept the worksheet's evidence log as the app's own words copied, and the exit ticket's third question answered by circling a tool.

STUDENTS WITH IEPS OR 504 PLANS

- Pair students for the independent scene, one working the tools and one keeping the log.
- Zoom the browser to 150%: the plan, the tools and the panel stay readable.
- Allow the independent part to be the glass view only, where the IEP allows a modified assignment.

STUDENTS WHO NEED MORE SUPPORT

- A sentence starter for the exit ticket: 'The photo comes first because ___.'
- A check-in after the guided lift: every student's strip reads 1 lift before anyone goes on.
- Do the glass and the desk; leave the floor's drops for the next lesson.

STUDENTS READY FOR MORE

- Open the Lab tab and compare the lift with the suspects' cards at the Prints station.
- Measure two markers on the sketch with the Measure tool, from A and from B, and write the four numbers.
- Open Setup, turn gloves to always on, and write what changed at the scene.

Adapting for other grades

Younger students: In grades 6 to 8, open Setup and pick middle school. Do the guided case together and the glass view alone; drop the third rubric row; total 8, and 6 meets the objectives.

Older students: In a college introductory course, add the sketch: every marker measured from A and from B with the Measure tool, and the printed case handed in with the sketch table filled.

Student worksheet

Name: _____ Date: _____

Open the app: scan the QR code, or go to mytekdev.com/try/crimescenelab?lesson=the-trophy-case

Essential question: Why does an investigator photograph everything before touching anything?

Warm-up: The first thing I would do at this scene: _____.

1. **Vocabulary.** Chain of custody, latent print, scale, evidence marker, lift: write each in your own words.

2. **The lift, together.** Lift number: ____. Its chain, in order numbers from the Evidence tab: photo ____, marker ____, powder ____, tape ____, sent ____. How many prints came up on the pane: ____. Whose is each one?

3. **The evidence log.** Every item you bagged: its marker, its photos (how many, and was one close with the scale), its bag (paper or plastic), and whether it reached the lab.

4. **The log line.** Copy the line under The evidence points at on the Case tab: _____.

1. Pick one mistake on your record. What did the scene lose because of it, and what does the chip on the Case tab say?

2. Why does a stain go in paper and not plastic? What does the app say happens to a swab in plastic?

Exit ticket

Name: _____

1. The photo the lab can measure from is: (A) the whole room (B) a midrange shot of the case (C) a close-up with the scale in the shot

2. A shard was picked up before it was photographed. The app says: (A) nothing (B) no photo in place, for good (C) take the photo now and it is fine

3. Name the two things that go beside an item before it is picked up, and say what each one is for.

Crime Scene Lab: The Trophy Case, a Crime Scene in One Period

Exit ticket

Name: _____

1. The photo the lab can measure from is: (A) the whole room (B) a midrange shot of the case (C) a close-up with the scale in the shot

2. A shard was picked up before it was photographed. The app says: (A) nothing (B) no photo in place, for good (C) take the photo now and it is fine

3. Name the two things that go beside an item before it is picked up, and say what each one is for.

Answer key: exit ticket

QUESTION	ANSWER	WHY
1	C	Only a close-up with the scale in the shot can be measured; the app's Lab reads nothing else.
2	B	There is no record of where it lay. The log keeps the line and the evidence chip carries it.
3	A numbered marker and the camera (a photo close up with the scale)	The marker ties the photo, the log and the bag to one number; the photo is the record of where it lay. Two named with their purposes is a full answer; two named with no purpose is half.

Rubric

Score each row from 1 to 4.

Name: _____

CRITERIA	4 EXCEEDS	3 MEETS	2 APPROACHING	1 BEGINNING
The order at the scene	Every item photographed close with the scale and marked before it was collected; the log line reads no mistakes.	Every item photographed and marked before collection; one item without the scale.	Most items photographed first; one or two picked up before a photo.	Items picked up before photographs, or no markers set.
The evidence log	Every bagged item listed with its marker, its photos, its bag and its chain in order, in the app's own words.	Every bagged item listed with its marker and its bag; chains mostly in order.	Some items listed; markers or bags missing.	The log is blank or does not match the app.
Explains how it works	Answers the essential question with the chain of custody named and an example from their own log.	Answers the essential question with the chain of custody named.	Says the photo comes first, with no reason.	Cannot say why the photo comes first.

Total: ____ / 12. A score of 9 or more meets the objectives.

Standards

No national standard covers forensics. The Common Core writing standard is the Case the scene feeds; the NGSS practices the lesson uses are named here and will be tagged when their text is read. Texas's Forensic Science course is the clearest fit and is cited in the teaching notes once the TEA page is read.

FRAMEWORK	CODE	GRADES	STANDARD	HOW THE LESSON MEETS IT
Common Core ELA	**W.9-10.1**	9-10	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	The log line and the evidence chips are the evidence a claim in the Case stands on; the worksheet's two questions ask for a claim with its reason.

Checked October 2026 against: Common Core State Standards, Writing, Grades 9-10.

Optional: save student work in a free class

The whole lesson runs at the link on the worksheet, with no accounts and no sign-up.

To keep students' cases, and see them all in one place, make a free class. It takes about ten minutes, once, and covers every lesson in this series: mytekdev.com/tools/class-setup

Students in a class open mytekdev.com/tools/crime-scene-lab/lessons/the-trophy-case/start instead of the worksheet link. Each one gets their own copy of the starter, and the same link reopens it next time.

Terms of use

Thank you for downloading this lesson. The plan, the handouts and the art were made by mytekDev.

You may:

- print and copy it for your students
- change it for your own classes
- post it on your class website or learning management system
- share this file with other teachers, whole and unchanged, with this page included

You may not:

- sell it, or put it in a product you sell
- share a changed copy
- claim it as your own

The app this lesson uses is free and runs in the browser. Students need no account. It is at mytekdev.com.

Questions, or found a mistake? Ask on the Teachers Pay Teachers Q&A for this resource, or write to us at mytekdev.com/contact.

© 2026 mytekDev. All rights reserved.