Lesson: Ghost Hunters: Rumpled Sheets

Lesson Topic: Three Types of Crime-Fighting Technology

Three Types of Crime-Fighting Technology

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Police work has changed a lot since the early 1900s.

Police forces have existed ever since the ancient societies of Rome and Greece. However, police work today is much different. Criminals use complex tactics to avoid the police. Fortunately, police forces can now use advanced technology to outsmart the lawbreakers.

Police have been recording fingerprints for more than 100 years. Matching prints is one of the surest ways to solve a case. In recent years, experts have invented extremely valuable fingerprint tools. Lasers and lights now allow police to pull fingerprints from almost any surface. There are also devices that can capture prints without using ink. After taking prints, police use a computer system to look for matches. It automatically checks the entered prints against millions of existing prints in the database. A match can provide essential evidence for solving a case.



Fingerprinting isn't just for finding criminals. Having fingerprints on file can help find people if they are lost.

Once a person is arrested, investigators may run a polygraph test. These tests are also called lie detectors. They work by assessing the person's reactions during police questioning. They keep track of things like blood pressure, breathing rate, and body temperature. Over the years, many people have been able to outsmart this test. In fact, many police officers have lost faith in the accuracy of polygraphs. However, experts are working to invent new and improved lie detectors.

Some of these advanced systems are run entirely by computers. The computer asks the questions and monitors responses. Experts say the computer can catch lies that police officers and common lie detectors might miss.



Polygraphs measure pulse, breathing, and blood pressure to alert the police when a suspect may be lying.



License plate technology, such as the camera pictured above, helps police officers track criminals on the run.

If a criminal is on the run, police may use vehicle-tracking technology. Automatic license plate reader (ALPR) systems take pictures of license plates. The computer system records the license plate image and alerts the police when there is match to a suspect's car. The system can photograph cars moving over 100 miles per hour. It even works in the dark. Many police officials have used these systems to track stolen vehicles and locate suspected kidnappers.



A computer can be a police officer's strongest ally in the fight against crime.

Through these technologies, one fact is clear: Crime does not pay, especially when science is on the investigators' side.

Question 1:

According to the article, how does modern police work differ from ancient Rome and Greece?

- It uses less technology and is less effective.
- It uses less technology and is more effective.
- It uses modern technology and is more effective.
- It uses modern technology and is less effective.

Question 2:

What is the main purpose of this article?

- to explain how modern technology helps law enforcement to capture and convict criminals
- to explain the history of the use of technology in law enforcement
- to explain how fingerprint technology and lie detectors assist law enforcement
- to explain how the methods criminals use have become more complex since ancient times

Question 3:

How does a more accurate lie detector test affect conviction rates for criminals?

- less false convictions but more convictions overall
- C less false convictions and more convictions overall
- O more false convictions but less convictions overall
- more false convictions and more convictions overall

Question 4:

Read the passage below.

Criminals use complex **tactics** to avoid the police. Thankfully, police forces can now use advanced technology to outsmart the lawbreakers.

What is a synonym for tactics?

- C movements
- methods
- weapons
- disguises

Question 5:

Read the passages below.

Passage 1

In recent years, experts have invented valuable fingerprint tools. Lasers and lights allow police to pull fingerprints from almost any surface. Other devices capture prints without ink. After taking prints, a computer system looks for matches.

Passage 2

Over the years, many criminals were able to outsmart lie detectors. However, experts have invented new and improved lie detectors. These advanced systems are run entirely by computers, which catch lies that common lie detectors miss.

How are these passages organized?

- Both passages describe events in order.
- Passage 1 gives a statement and then supporting details. Passage 2 states a problem and solution.
- Both passages state a problem and then the solution.
- Passage 1 describes events in order. Passage 2 states a problem and then the solution.

Question 6:

With which statement would the author of this article most likely agree?

- C Law enforcement cannot keep up with the increasingly complex methods of criminals.
- Police today could learn a lot about their jobs by examining the past.
- When all outcomes are weighed, technology does more harm than good.
- In twenty years, law enforcement techniques will likely be more effective than they are now.

Question 7:

The author argues that law enforcement has become much more effective since technology has improved. What additional detail would make this argument stronger?

- C the increased number of kidnappers found using vehicle-tracking technology
- a more detailed description of the modern day tactics criminals are using
- the exact number of fingerprints that are located in the fingerprint database
- the blood pressure, breathing rate, and body temperature that indicates a criminal is lying

Question 8:

Read the passage below.

Once a criminal is captured, investigators may run a polygraph test. These tests are also called lie detectors. Over the years, many criminals have been able to outsmart this test. In fact, many police officers have lost faith in the accuracy of polygraphs. However, experts are working to invent new and improved lie detectors. The computer asks the questions and monitors responses. Experts say the computer can catch lies that police officers and common lie detectors might miss.

might miss.
Why did the author most likely include this passage?
o to argue that law enforcement should not use polygraphs
to contrast the polygraph's old reputation with how it's improving today
to show how vital lie detectors are to police investigations
to demonstrate that technology can be helpful but also harmful to law enforcement
Question 9:
If you were writing an article on new fingerprinting technology, which details would you most need to include?
Check all that are true.
☐ Police have been recording fingerprints for more than 100 years.
lacktriangle Automatic license plate reader systems take pictures of license plates.
\square Lasers and lights allow police to pull fingerprints from almost any surface.
☐ There are devices that can capture prints without using ink.

☐ Once a criminal is captured, investigators may run a polygraph test.