



INVESTIGATING CRIME SCENES

- 1 Crime is the act of breaking the law — the set of rules agreed upon by the majority of a society.

There are many different types of crime. Crime can take place on computers, on paper and in bank accounts. Other felonies take place in the real world — down alleyways, on street corners and in people's houses. Shootings, muggings, robberies and crimes of this nature leave physical clues in the place where they were committed. This is called a crime scene. Police officers and detectives investigate a crime scene using a science called *forensics*. Forensic investigators find clues and

gather evidence to present to a judge and jury. The word *forensic* means 'suitable for a court of law'. Here is how a forensic investigation might work.

- 2 First, an investigator needs to uncover evidence at the crime scene. Evidence can come in many forms: a criminal may leave a footprint, a fingernail or a strand of hair behind. All of these things are indications that the criminal was at the crime scene and, more importantly, they were there when the crime was committed. This evidence is necessary to prove beyond any reasonable

doubt that someone committed a crime. Mistakes and incorrect evidence could mean an innocent person is sent to prison.

Evidence should not be disturbed. Police will tape off the area to preserve the scene. When the crime scene is safe and secure, a forensic team will enter. A forensic team may include a bomb expert, a weapons expert, a blood specialist and a photographer. They may also need an expert in fingerprinting, explosives, or drugs.

- 3 The crime may have happened in a small room that is easily searched by one or two people. Or it may cover a large area, like a shopping mall or a plane crash site, where the evidence is strewn over a wide area and many searchers are needed. Outdoor sites must be searched quickly before weather destroys the evidence. Large areas are searched in two different ways: investigators walking forward in a line, so that each person only has to look at a small section, or, the area being broken up into a grid using pegs and rope. This way, investigators can keep a record of the exact areas that have been examined.

- 4 Evidence must not be contaminated in any way. Investigators wear overalls, caps, gloves and shoe covers to prevent their own hair and skin from being accidentally collected. Items like blood, carpet fibres and soil are collected and kept in sealed bags or bottles. These containers are then marked with details of their discovery — the time, date, location and purpose of the evidence.

- 5 Photos are taken as soon as possible, so there is a permanent record of the crime scene. These photos have details noted on them; where items were found, the angle they were at and special marks or features. Shoe prints are photographed with a ruler beside them to show their size and, if these prints have left an impression, plaster casts are made for analysis. Sometimes special lighting like laser or ultraviolet light is used to reveal clues.

Blood can be scrubbed off a wall, making the wall look clean in normal light, but chemicals found in blood will appear under ultraviolet light.

Evidence can also be found under water, by either sending divers down or, if the area to be searched is large, by trawling. Trawling is when a large net is dragged across the bottom of a lake to pick up evidence, such as weapons lying on the bottom.

- 6 Once all of the evidence has been collected, it needs to be tested so it can reveal important clues about the crime. This is where the science of forensics comes into play. When a gun is fired, it will leave trace chemicals behind. If these chemicals are found on a person's clothing, it is likely that person fired the gun. Bullets can be linked back to specific guns, through identifying the markings left on the bullet by the gun when it was fired. Forensic scientists are able to pinpoint exactly where someone was standing when the gun was fired, by looking at the angle that a bullet penetrates a wall or other surface. Shotguns do not fire bullets, they fire small pellets that spread out as they move through the air; forensics can work out how far away the gun was by how far the pellets spread out.

- 7 Soil particles on clothing, or shoes, can be analysed to work out if a person was at the scene of the crime. If there is a dead body, the body can be examined to work out the time of death, which is useful in pinpointing whether or not a suspect was at the scene when the crime was committed. Many environmental clues can be used to build an almost accurate image of the crime. Forensic scientists need patience; they need to pay attention to tiny details. High-powered microscopes, and other finely tuned instruments, are invaluable tools.

- 8 Another form of evidence that has become well known in the last decade is DNA evidence. DNA is a genetic code found in every cell within our

body. You can think of it as a blueprint for who we are, and, as everyone is different, no one has the same DNA — except for identical twins. DNA can be found at crime scenes in the form of dry skin and body fluids, such as blood and saliva. These are taken and tested in a laboratory, so a map of the DNA can be produced. However, in order to be helpful, the investigators also need DNA tests from suspects. If one of these DNA tests matches with the sample from the evidence, then there is a high probability that the suspect was involved in the crime. Due to the popularity of television shows about forensic science, many people believe that DNA evidence is all that is needed to solve a crime. This is not true — but it can help!

- 9 The final step in investigating a crime scene is to put together all of the analysed evidence for court. Remember, all of the evidence must prove that a suspect is guilty beyond any reasonable doubt; otherwise they cannot be sentenced as a criminal.

Investigating crime scenes is a very important job for police officers and the more successful they are, the safer our society is.



Questions

- 1 *Forensics* is a
 a crime.
 b law.
 c science.



- 2 Why must evidence be 'beyond reasonable doubt'?
- This stops innocent people from going to jail.
 - This allows evidence to be shown in court.
 - This helps investigators preserve any evidence they find at a crime scene.
- 3 What is a useful way for searching large crime scenes?
- dusting for fingerprints
 - collecting shoeprints
 - making a rope grid

- 4 What helps to determine the angle that a gun was fired at?
- gunpowder traces
 - holes in a wall
 - marks in a bullet
- 5 Forensic scientists need to
- be very thorough.
 - work at court.
 - arrest suspects.
- 6 What is a good way to describe crime scene investigation?
- It is a task that needs everyone in a community to help make it work.
 - It is a task that needs the cooperation of different experts to make it work.
 - It is a task that can be accomplished by most people.

Vocabulary

Find words in the text that match the meanings below. The word is in the section shown in brackets.

- Thin or narrow streets (1)
- Scattered or spread (3)
- The opposite of temporary (5)
- To be precise or exact (7)
- A period of ten years (8)

Grammar

The words in **BLUE** appear in the text. Match them by writing the correct antonym shown in **RED**.

E.g. *under* / *above*

- | | |
|-------------|---------------|
| 12 majority | vulnerable |
| 13 suitable | minority |
| 14 secure | permit |
| 15 prevent | inappropriate |

Back To The Text...

- 16 In which part of the library would you find this text?
- fiction
 - non-fiction
- 17 What would be a good sub-heading for section 3?
- Seek and Find
 - Photographic Evidence
- 18 The purpose of this text is
- to explain.
 - to persuade.

Think About This

- 19 Look at the illustration on the cover of the card. The investigator in the coat is probably
- having a quick meal.
 - 'bagging' the evidence.
 - tidying up the mess.
- 20 Look at the illustration on the cover of the card. The lines on the floor probably
- show the shadow of the suspect.
 - are part of a child's drawing.
 - show where the body fell.
- 21 The word *analysis* in section 5 means
- keeping.
 - protection.
 - matching.
 - examination.
- 22 What does the writer mean when they say "the more successful they are, the safer our society will be"? (section 9)
- Successful police make our society better.
 - If more criminals are caught we will be safer.
 - Crime scenes are safer if the police are there.
- 23 Television has led to what common misconception?
- All crimes are solved in the end.
 - All crimes are solved using DNA.
 - All crime scenes are very carefully examined.

Challenge Option

Research: CSI is an *acronym* for Crime Scene Investigation. What other *acronyms* do you know?

