

Initial Actions in the Investigative Process

Section A: True/False

Directions: Write True or False on the blanks provided; if False, write the correct statement on the lines provided.

1. _____ The scientific method has been recognized by courts across the United States and Canada as a valid methodology for fire investigation. (205)

2. _____ The purpose of an investigation is to find out what happened and to document it clearly for future reference. (207)

3. _____ Most commonly, private sector investigators enter a scene under exigent (urgent) circumstances in which an immediate need is being met and, therefore, a warrant is unnecessary. (208)

4. _____ Private investigators often have contractual positions to enter a scene and may not need a warrant. (208)

5. _____ A fire is not an exigent circumstance, so firefighters and investigators must have a warrant to enter the scene. (209)

6. _____ Once investigators leave the scene or the fire scene has been released, investigators may be prevented from reentering the property without first gaining the consent of the owner or obtaining a warrant. (209)

7. _____ Evidence may be inadmissible in court if an investigator enters a structure without consent, exigent circumstances, or a warrant. (210)

8. _____ Private fire investigators should ensure that permission to be on the premises has been obtained through court order or by verbal or written consent prior to conducting an investigation or collecting evidence. (211)
- _____
- _____
9. _____ Investigators should schedule interviews with firefighters and other first responders at any time investigators consider suitable. (215)
- _____
- _____
10. _____ A primary objective for limiting access to the fire scene is security. (220)
- _____
- _____
11. _____ The size of the perimeter may change during an incident based on the situation and progression of the investigation. (219)
- _____
- _____

Section B: Fill in the Blank

Directions: Write the correct answer on the blanks provided.

1. The scientific method is required by NFPA _____ and recommended by NFPA _____. (205)
2. To aid in maintaining objectivity, a discussion of the perils of _____ can be helpful. (207)
3. For an investigation to be complete, it is essential for investigators to conduct a proper examination of the _____ and _____ of a structure. (208)
4. A _____ or consent must be obtained once an investigator has probable cause that a crime has been committed and additional entries into the scene are necessary. (212)
5. In most cases, if investigators arrive after the scene has been released, they must obtain _____ or a _____ to reenter. (212)
6. Establish the perimeter for explosions at _____ times the distance from the farthest piece of debris found. (219)

7. Secure the scene to protect evidence from being _____, _____, or _____ before it can be documented, preserved, or collected. (221)
8. _____ refers to evidence that is destroyed, damaged, altered, or otherwise not preserved by someone who has the responsibility to preserve it. (223)

Section C: Matching

Directions: Write the correct answers on the blanks provided.

Part I: Nonverbal Communication

Match the nonverbal clues with its definition.

Choices:

- A. Kinesics
- B. Self-presentation
- C. Paralanguage

Questions:

- _____ 1. Clothing, touch, use of time, and control of the speaker's environment. (214)
- _____ 2. Use of body motion and position. (214)
- _____ 3. Vowel sounds or tones used to create the verbal message. (214)

Part II: Other Indicators from Firefighters

Match the indicator with its description.

Choices:

- A. Building indicators
- B. Smoke indicators
- C. Heat indicators
- D. Flame indicators

Description:

- _____ 1. Rapidly increasing volume, turbulence, darkening color, optical density, and lowering of the hot gas layer and/or neutral plane (218)
- _____ 2. Isolated flames or rollover in the hot gas layers or near the ceiling (218)
- _____ 3. Interior configuration, fuel load, thermal properties, and ventilation (218)
- _____ 4. Post extinguishment indicators of rapidly increasing temperature in the compartment, such as pyrolysis of contents or fuel packages located some distance away from the fire, or hot surfaces (218)

Section D: Multiple Choice

Directions: Write the correct answers on the blanks provided.

- _____ 1. When does confirmation bias occur? (207)
- A. The investigators collect only evidence that can be obtained without a warrant.
 - B. The investigators fail to account for additional or contradictory data.
 - C. The investigators use a systematic approach to evaluate the information gathered.
 - D. The investigators examine, analyze, or consider all of the data in a systematic or logical manner to reach a scientifically valid conclusion.
- _____ 2. Why may public sector investigators documentation of the scene be the only information available to all subsequent investigators and investigations? (209)
- A. Because they are the only ones who know how to do a fire investigation.
 - B. Because they are the only ones who know how to use the scientific method.
 - C. Because they may be the only experienced investigators in the jurisdiction.
 - D. Because they may be the only investigators to observe the scene before its alteration.
- _____ 3. Public sector investigators entering under exigent circumstances may also remain on the scene for: (209)
- A. just as long as the property owner deems convenient.
 - B. a reasonable amount of time to determine the fire's origin and cause.
 - C. just as long as the fire and police department officials deem it to be convenient.
 - D. as long as they consider necessary to determine the fire's origin and cause.
- _____ 4. What U.S. Supreme Court decision reinforced the right-of-legal entry without a search warrant? (209)
- A. New York vs. Hill (2000)
 - B. Michigan vs. Tyler (1978)
 - C. The Standard Fire Insurance Company vs. Knowles (2005)
 - D. Pennsylvania Fire Ins. Co. v. Gold Issue Mining Co. (1917)
- _____ 5. The U.S. Supreme Court agreed, with modification, with the Michigan State Supreme Court's statement that "[if] there has been a fire, the blaze extinguished, and the firefighters have left the premises a warrant is: (210)
- A. not required to reenter and search the premises."
 - B. required to reenter and search the premises, unless there is consent."
 - C. required to reenter and search the premises, even when there is consent."
 - D. required to reenter and search the premises; also, a consent must be obtained."

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- _____ 6. The person granting consent: (211)
- A. cannot withdraw that consent until the search has finished.
 - B. can withdraw that consent at any time but the search can continue.
 - C. can withdraw that consent at any time and the search cannot continue.
 - D. cannot withdraw that consent until the court authorizes that person to do so.
- _____ 7. Why does an investigator have to temporarily halt an investigation when evidence of crime is found? (212)
- A. The investigator has to obtain consent
 - B. The investigator has to obtain a contractual entry
 - C. The investigator has to obtain a criminal search warrant
 - D. The investigator has to obtain an administrative search warrant
- _____ 8. When it is determined that a fire was intentionally set and a search for further evidence is needed, consent or a criminal search warrant should be obtained for: (213)
- A. each reentry unless an exigent circumstance exists.
 - B. each reentry when an exigent circumstance exists.
 - C. an extended period and with a restricted number of entries to the fire scene.
 - D. an extended period no matter how many times it is required to enter the scene.
- _____ 9. What information must be obtained when conducting a witness interview? (215)
- A. Any issue with the internet service in or around the building
 - B. Personal activities of the witness after the fire was extinguished
 - C. Names and number of people that were out of the structure at the time of the event
 - D. Homeowner's insurance carrier and insurance agent policy number (if homeowner/occupant)
- _____ 10. The security of the scene is initially the responsibility of the: (219)
- A. property owner.
 - B. driver/operator.
 - C. fire investigator.
 - D. fire-suppression personnel.
- _____ 11. A primary objective for limiting access to the fire scene is: (220)
- A. health.
 - B. safety.
 - C. security.
 - D. fire suppression.

- _____ 12. How should investigators interview witnesses to ensure individual observations are not influenced by other witnesses' perspectives? (215)
- A. Separate
 - B. Using a panel interview
 - C. By category groups such as neighbors, occupants, and suspects
 - D. Using a role playing technique for effective witness interview

Section E: Short Answer

Directions: Write the correct answers on the lines provided.

1. List the general steps of the scientific method. (205)

2. What are six pieces of information that will assist the investigator with determining the fire's area of origin? (206-207)

3. What are the considerations as to how quickly an investigation can begin? (208)

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4. List six means or methods fire investigators may use to obtain the right to enter a scene. (209)

5. What should occur when investigators have reasonable cause to believe that evidence will be destroyed? (211)

6. List potential consequences when a private fire investigator's actions exceed legal authority. (211)

7. What types of information does an investigator use to begin to establish a timeline? (213-214)

8. What are the circumstances before the discovery of a fire that interviewers should asked about? (215)

9. What information should an investigator ask first responders about during interviews? (217)

10. How can an Incident Commander help to preserve evidence? (222)

11. What is evidence contamination? (222)

Section F: Scenario

Directions: Answer the following question based on the scenarios below.

Scenario 1 (219-220)

A large-scale fire occurs on the fourth floor of a business building that has 80 stories in total. The emergency units of the two fire stations closest to the building are already operating at the emergency site. Also, six local police units and a total of 12 police officers are supporting the operations. You are the fire investigator and arrive at the emergency just at the moment when rescue operations are being initiated.

1. What early security measures should be taken?

2. How can law enforcement personnel be used in this scenario?

Scenario 2 (218)

A fire investigator is conducting an initial interview of available eyewitnesses. The witnesses reported that they heard an explosion, the windows in the building suddenly broke out, and flames came out of the windows. As part of the evidence, the investigator has collected broken window glass.

1. What may that indicate?
