

Chapter 20 Test

Name: _____ Date: _____

Directions: Write the correct letter on the blank before each question.

- _____ 1. In order to provide information for the fire investigations, firefighters at a scene should: (933) [5.3.4]
- A. interview the owner of the property.
 - B. interview witnesses and bystanders.
 - C. take note of any indications of unusual fire behavior.
 - D. make a list of fire department and mutual aid resources used.
- _____ 2. At a fire scene, firefighters should NOT: (933-934) [5.3.4]
- A. keep a written record of on-scene observations.
 - B. enter the scene during a fire investigation without a warrant.
 - C. ask permission from owners before removing evidence from the building.
 - D. share their opinion of the probable fire cause with media or bystanders.
- _____ 3. Which duty would a fire investigator perform at a fire scene investigation? (934) [5.3.4]
- A. Interviewing firefighters on scene
 - B. Cleaning up the fire scene after the investigation
 - C. Helping with overhaul to ensure no evidence is disturbed
 - D. Determining a fire attack strategy that will keep evidence intact
- _____ 4. The area of origin will usually contain: (936) [5.3.4]
- A. evidence of arson.
 - B. piles of stacked materials that act as a fuel.
 - C. the greatest amount of damage and debris.
 - D. an obvious ignition source and material first ignited.

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- _____ 5. Which would be potential evidence when examining the exterior of a structure for the area of origin? (937-938) [5.3.4]
- A. Unlocked doors or windows
 - B. Any indication of forcible entry
 - C. Construction type of the building
 - D. Signs that the building is occupied
- _____ 6. When examining the interior of a structure for the area of origin, (938) [5.3.4]
- A. work from the area of greatest damage to the area of least damage.
 - B. charring on the floor is the strongest indicator of area of origin.
 - C. work from the area of least damage to the area of greatest damage.
 - D. items with charring on all sides indicate that the fire was set intentionally.
- _____ 7. When trying to locate the area of origin of a ground cover fire, you must know: (940) [5.3.4]
- A. the precise time the fire started.
 - B. how wind and topography can affect fire spread.
 - C. the fire cause before determining the area of origin.
 - D. construction types for buildings in the affected area.
- _____ 8. Why is it important to determine the cause of a fire? (942) [5.3.4]
- A. So the homeowners or occupants can have peace of mind
 - B. So the owners of the property can be fined, if necessary
 - C. So firefighters can document which occupancies will require close supervision in the future
 - D. So that the unsafe behavior that caused the fire can be corrected through educational programs for the public
- _____ 9. Which characteristic must a material have to be the material first ignited? (943) [5.3.4]
- A. Exist in a liquid state
 - B. Exist in a gaseous state
 - C. Far enough from windows and doors to not be disturbed by airflow
 - D. Close enough to the ignition source to receive energy from the ignition source

- _____ 10. Which type of fuel source would require the greatest amount of heat to ignite because it must undergo pyrolysis in order to burn? (943) [5.3.4]
- A. Wood
 - B. Gasoline
 - C. Hydrogen
 - D. Diesel fuel
- _____ 11. The events that lead up to a fuel package being ignited and starting a fire are known as the: (944) [5.3.4]
- A. decay stage.
 - B. growth stage.
 - C. ignition sequence.
 - D. combustion chain reaction.
- _____ 12. If someone falls asleep while smoking in bed and their house catches on fire, that would be an example of a(an) _____ fire. (945) [5.3.4]
- A. natural
 - B. accidental
 - C. incendiary
 - D. undetermined
- _____ 13. Lightning striking a tree and setting it on fire would be an example of a(an) _____ fire. (946) [5.3.4]
- A. natural
 - B. accidental
 - C. incendiary
 - D. undetermined
- _____ 14. Which would be classified as an incendiary fire? (946) [5.3.4]
- A. Overloading an electrical circuit
 - B. A piece of machinery overheats
 - C. Setting a business on fire to collect insurance money
 - D. An earthquake breaking a power line, which sparks and catches a house on fire
- _____ 15. What factors must fire investigators identify before classifying fire cause? (946) [5.3.4]
- A. Scope of damage, insurance, injuries sustained
 - B. Ignition source, exposures, firefighting tactics used
 - C. Ignition source, material first ignited, ignition sequence
 - D. Building construction classification, exposures, ignition source

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- _____ 16. Which is the most obvious sign of fire cause? (946) [5.3.4]
- A. Extent of damage
 - B. Occurrence of flashover
 - C. Competent ignition source
 - D. Time between incipient and growth stages
- _____ 17. Which is a responsibility of a Fire Fighter II concerning evidence at a fire investigation? (947) [5.3.4]
- A. Briefing the press about the cause of the fire
 - B. Determining which evidence is admissible in court
 - C. Restricting access to the scene in order to protect evidence
 - D. Detaining bystanders who may have information about evidence
- _____ 18. How large should the perimeter outside a structure fire be? (947) [5.3.4]
- A. A minimum of 100 feet (30 m) in every direction from the building
 - B. A minimum of 250 feet (75 m) in every direction from the building
 - C. Large enough to surround the building and any adjacent exposure buildings
 - D. Large enough to surround the building and all potential evidence outside the building
- _____ 19. When establishing a perimeter around a fire scene, the perimeter must be: (947) [5.3.4]
- A. visible and recognizable.
 - B. marked using permanent barriers.
 - C. continuously staffed by a law enforcement officer.
 - D. as small as possible, with room to expand if necessary.
- _____ 20. If a deceased victim is encountered during the course of an incident or during the investigation,,: (948) [5.3.4]
- A. the victim should be left undisturbed and treated as evidence.
 - B. the victim should be covered and then transported as soon as possible.
 - C. firefighters must leave the scene immediately and turn control over to law enforcement.
 - D. firefighters must treat the scene as both a fire scene and a medical emergency incident.

- _____ 21. An occupant stating that the room smelled like propane immediately before the fire started is an example of _____ evidence. (948) [5.3.4]
- A. trace
 - B. direct
 - C. physical
 - D. circumstantial
- _____ 22. Which would NOT be an example of physical evidence at a fire scene? (950) [5.3.4]
- A. A witness' statement
 - B. Debris from an explosion
 - C. Damage to electrical wiring
 - D. Tire tracks outside the structure
- _____ 23. Which statement describes how evidence should be handled at a fire investigation? (951) [5.3.4]
- A. Firefighters are not responsible for any kind of evidence documentation.
 - B. Evidence should be bagged and removed from the fire scene as quickly as possible.
 - C. Evidence should be moved to a central location in the structure so that it is easy for the fire investigator to analyze.
 - D. Any firefighter who handles evidence becomes part of the chain of custody for that evidence.
- _____ 24. Which action can firefighters take to protect evidence at the fire scene? (951) [5.3.4]
- A. Perform a thorough overhaul
 - B. Remove all evidence from the building
 - C. Cover items with salvage covers or tarps
 - D. Delay fire suppression until evidence is collected
- _____ 25. Which action should be carefully conducted, because it can cause destruction or contamination of evidence at a fire scene? (951) [5.3.4]
- A. Rescue
 - B. Size-up
 - C. Overhaul
 - D. Rehabilitation

- _____ 26. Which is an example of evidence spoliation? (952) [5.3.4]
- A. Covering evidence with cardboard or tarps
 - B. Accidentally walking over suspicious footprints at the scene
 - C. Altering evidence so that an insurance investigator cannot document it
 - D. Applying water to extinguish fire in the same compartment as the area of origin
- _____ 27. Which action could be considered illegal at a fire scene? (952) [5.3.4]
- A. Fire department personnel searching for evidence during the course of the fire investigation
 - B. A homeowner denying the fire department the right of entry after the fire scene has been relinquished
 - C. Law enforcement officers informing a suspect of his or her Miranda rights at the scene of a fire investigation
 - D. Fire department personnel giving up control of the scene, but then re-entering without probable cause without a warrant