

Terms

Write the definition of the terms below on the blanks provided.

1. **Booster Hose or Booster Line (764)** _____

2. **Smoke (767)** _____

3. **Direct Attack (Structural) (767)** _____

4. **Indirect Attack (Structural) (768)** _____

5. **Combination Attack (768)** _____

6. **Master Stream (769)** _____

7. **Aerial Ladder (771)** _____

8. **Aerial Ladder Platform (772)** _____

9. **Articulating Aerial Platform (772)** _____

10. **Boiling Liquid Expanding Vapor Explosion (BLEVE)** (774) _____

11. **Liquefied Petroleum Gas (LPG)** (779) _____

12. **Polychlorinated Biphenyl (PCB)** (782) _____

13. **Blitz Attack** (790) _____

14. **Rapid Intervention Crew (RIC)** (792) _____

15. **Topography** (803) _____

16. **Direct Attack (Wildland)** (806) _____

True/False

Write True or False on the lines provided; if False, write the correct statements on the lines provided.

- _____ 1. Teams advancing hoselines into structure fires should carry equipment that may be needed to provide EMS support to victims found inside. (762)

- _____ 2. Before opening a door to a fire area, teams should check the door for heat by using a thermal imager or applying a small amount of water to the surface. (766)

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- _____ 3. The intent of cooling the hot gas layer is to create a large volume of steam. (767)
- _____ 4. Master stream devices can be moved while in operation. (769)
- _____ 5. Master stream devices usually take a minimum of two firefighters to deploy and supply. (770)
- _____ 6. Water is the best extinguisher of energized equipment fires. (781)
- _____ 7. Only a relatively small number of electrical emergencies involve fires in electrical substations or transmission lines. (781)
- _____ 8. Smoke from fires in commercial high-voltage complexes may be toxic. (782-783)
- _____ 9. The RIC crew may be assigned other emergencies duties. (792)
- _____ 10. A typical residential response is usually adequate for a fire in upper levels of structures. (793)
- _____ 11. Booster lines should be used to effectively and safely fight a vehicle fire. (796)

- _____ 12. Small trash container fires can be fought with booster lines. (799)
- _____ 13. Topography is the most significant influence on wildland fire behavior. (800-801)
- _____ 14. The methods used to attack wildland fires revolve around perimeter control. (805)
- _____ 15. A direct attack on a wildland fire is used at varying distances from the advancing fire. (805)

Matching

Write the correct answers on the blanks provided.

- _____ 1. Is the most efficient use of water on free-burning fires (767)
- _____ 2. Is used when firefighters are unable to enter a burning building or compartment (768)
- _____ 3. Uses the heat-absorbing technique of cooling the hot gas layer followed by a heat-reducing attack on the materials burning near the floor level (768)
- A. Combination attack
B. Direct attack
C. Indirect attack

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- _____ 4. Used to apply water to the upper stories of multistory buildings, either in a direct fire attack or to supply handlines (771)
- _____ 5. Either engines equipped with a hydraulically operated extension ladder or an aerial apparatus equipped with a pump (771)
- _____ 6. Apparatus equipped with hydraulically operated extension ladders (771)
- _____ 7. Engines equipped with hydraulically-operated booms that are dedicated to applying water (771)
- _____ 8. The area where the fire started, and the point from which it spreads (803)
- _____ 9. The part of a wildland fire that spreads most rapidly; usually found on the opposite side from the area of origin (803)
- _____ 10. Long narrow strips of fire extending from the main fire (803)
- _____ 11. The outer boundary, or the distance around the outside edge of the burning or burned area (804)
- _____ 12. The rear of a wildland fire opposite the head (804)
- _____ 13. The sides of a wildland fire, roughly parallel to the main direction of fire spread (804)
- _____ 14. Patches of unburned fuel inside the fire perimeter (804)
- _____ 15. The area of unburned fuels next to the involved area (804)
- _____ 16. The area in which the fire has consumed the fuels (804)
- A. Aerial apparatus
B. Aerial ladders
C. Elevated master stream devices
D. Quints
E. Water towers
- A. Black
B. Green
C. Head
D. Heel
E. Islands
F. Fingers
G. Flanks
H. Origin
I. Perimeter
J. Spot fires

Short Answer

Write the correct answers on the blanks provided.

1. What should the person at the nozzle do before entering a building or fire area? (762)

2. What are the main uses for a master stream? (769)

3. What are three of the consequences of electrical shock? (784-785)

4. What are two of the factors most affecting the seriousness of electrical shock? (785)

5. What are two types of fixed fire extinguishing systems that firefighters may encounter? (795)

6. What are two of the atmospheric conditions that may be encountered in confined spaces? (800)

7. What are two factors that affect the burning characteristics of fuels in wildland fires? (802)

8. What are the standard fire fighting orders when fighting wildland fires? (806)

Multiple Choice

Write the correct answers on the blanks provided.

- _____ 1. Which of the following is NOT a piece of equipment that should be carried by teams advancing hoselines into a structure fire? (762)
- A. Pike pole
 - B. Hand light
 - C. A portable radio
 - D. Spanner wrench
- _____ 2. Whenever possible, approach and attack a fire from the ___ side to keep it from spreading throughout the structure. (763)
- A. burned
 - B. unburned
 - C. leeward
 - D. windward

- _____ 3. What should be done with valuables found during overhaul? (763)
- A. Returned to the station
 - B. Turned in to a supervisor
 - C. Returned to victims on-scene
 - D. Turned over to law enforcement
- _____ 4. Which of the following is NOT a consideration before entering a burning building? (766)
- A. Verify that EMS is on-scene.
 - B. Read the fire behavior indicators.
 - C. Identify potential emergency escape routes.
 - D. Assess forcible entry requirements.
- _____ 5. Which of the following statements about gas cooling is MOST accurate? (767)
- A. Gas cooling is used when faced head-on with a fire.
 - B. Gas cooling is an effective fire extinguishment method.
 - C. Gas cooling increases the hazards presented by the hot gas layer.
 - D. Gas cooling can be used when faced with a fire that cannot be seen from the doorway.
- _____ 6. When cooling the hot gas layer, apply: (767)
- A. Class B foam.
 - B. short pulses of water fog.
 - C. long pulses of water fog.
 - D. aqueous film forming foam.
- _____ 7. When cooling the hot gas layer, set the nozzle at a ____ degree fog pattern. (767)
- A. 20- to 30-
 - B. 30- to 40-
 - C. 40- to 60-
 - D. 60- to 80-
- _____ 8. A master stream device should be aimed so that it deflects off the: (769)
- A. roof.
 - B. floor.
 - C. ceiling.
 - D. interior walls.

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- _____ 9. Class C fires involve: (780)
- A. hazardous materials.
 - B. ordinary combustibles.
 - C. flammable liquids and gases.
 - D. energized electrical equipment.
- _____ 10. What are the most serious hazards presented by underground transmission line fires? (782)
- A. Mechanical burns
 - B. Dispersion of toxic gases
 - C. Carbon monoxide poisoning
 - D. Explosions caused by blown fuses
- _____ 11. Who makes the decision to keep the electrical power on at a fire or emergency scene? (783)
- A. Incident Commander
 - B. Incident Safety Officer
 - C. Power company personnel
 - D. Law enforcement personnel
- _____ 12. Which of the following is a guideline for electrical emergencies? (785)
- A. Firefighters should cut power lines immediately.
 - B. Do not use fog streams on energized electrical equipment.
 - C. Use only solid or straight streams on fires in energized electrical equipment.
 - D. Jump clear of any apparatus (keeping both feet together) that may be energized by contact with power lines.
- _____ 13. Which of the following is a responsibility of the first-due engine company? (789)
- A. Protect primary means of egress.
 - B. Protect the most threatened exposure.
 - C. Finish a hose lay and lay an additional line.
 - D. Assist with fireground support company operations.
- _____ 14. Which of the following is a responsibility of the fireground support company? (790)
- A. Call for more resources to be dispatched.
 - B. Assess the scene to determine further actions.
 - C. Perform forcible entry, ventilation, and overhaul.
 - D. Assist with fireground support company operations.

- _____ 15. In a fire in upper levels of structures, the fire attack is typically initiated from ____ the fire floor. (793)
- A. the floor below
 - B. the floor above
 - C. two floors below
 - D. two floors above
- _____ 16. What type of nozzle is used to control a basement fire without entering the basement? (793)
- A. Fog nozzle
 - B. Cellar nozzle
 - C. Straight nozzle
 - D. Piercing nozzle
- _____ 17. Which of the following is NOT a danger involved when dealing with fixed systems? (795)
- A. Poor visibility
 - B. Toxic environment
 - C. Carbon dioxide depletion
 - D. Energized electrical equipment
- _____ 18. A vehicle fire should be fought from a ____-degree angle to the long axis of the vehicle. (797)
- A. 25
 - B. 45
 - C. 50
 - D. 90
- _____ 19. If there is a hazard in getting close to a vehicle fire, use a ____ stream from a distance to reach under the vehicle. (798)
- A. fog
 - B. solid
 - C. straight
 - D. broken
- _____ 20. Which of the following is NOT a hazard posed by vehicle fires? (799)
- A. Air bags can deploy.
 - B. Catalytic converters can act as an ignition source.
 - C. Interior components burn rapidly and emit toxic gases.
 - D. Electric locking systems can cause high-velocity explosions.

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- _____ 21. Fires in confined spaces may be attacked: (800)
- A. directly.
 - B. indirectly.
 - C. with solid-stream nozzles.
 - D. with fog-stream nozzles.
- _____ 22. Which of the following is NOT a main influence on wildland fire behavior? (800)
- A. Fuel
 - B. Weather
 - C. Topography
 - D. Techniques used
- _____ 23. What type of fuel includes roots, peat, and other partially decomposed organic matter that lie under the surface of the ground? (801)
- A. Aerial fuels
 - B. Surface fuels
 - C. Subsurface fuels
 - D. Underground fuels
- _____ 24. Wildland PPE should meet the requirements of NPFA[®]: (805)
- A. 1001.
 - B. 1971.
 - C. 1977.
 - D. 2007.
- _____ 25. Which of the following pieces of wildland gear is NOT required by NFPA[®] 1500? (805)
- A. Gloves
 - B. Fusees
 - C. Helmet with eye protection
 - D. Flame retardant shirt and pants

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True/False

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

- _____ 1. Water is still the agent most often used to extinguish structure fires. (763-764)

- _____ 2. Combination fog nozzles have a greater reach and penetration than straight or solid streams. (764)

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- _____ 3. Combustible liquids are those that have flash points of less than 100°F (38°C). (773)
- _____ 4. Whenever attacking BLEVE fires, apply water to the lower portions of the tank. (774)
- _____ 5. Applying foam is the method most often used for controlling flammable liquid fires. (774)
- _____ 6. Bills of lading and manifests should be used to determine the exact nature of cargos at a bulk transport vehicle fires. (778)
- _____ 7. Natural gas is made up of mostly methane, which is flammable and extremely toxic. (778)
- _____ 8. Propane is explosive in concentrations between 5 and 15 percent in air. (779)
- _____ 9. An LPG leak will produce a visible cloud of vapor that hugs the ground. (779)
- _____ 10. Flammable gas incidents should be approached from and staged on the upwind side. (779)

Short Answer

Write the correct answers on the blanks provided.

1. What are five of the factors involved in selecting the correct hoseline? (764)

2. What are three of the major differences in fires in vehicles transporting flammable fuels and storage facilities? (777)

Multiple Choice

Write the correct answers on the blanks provided.

- _____ 1. For interior fire fighting, the smallest handline used should be: (764)

A. booster line.
B. 1-inch (25 mm).
C. 1½-inch (38 mm).
D. 1¾-inch (45 mm).

- _____ 2. Stream selection is dictated by: (764)

A. the fire situation.
B. potential fire spread.
C. the ease of hoseline deployment.
D. the fire load and material involved.

- _____ 3. What types of nozzles provide the greatest reach? (764)

A. Adjustable nozzles
B. Solid-stream nozzles
C. Combination (fog) nozzles
D. Straight- and solid-stream nozzles

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- _____ 4. What types of nozzles provide streams that are effective at cooling hot gases? (764)
- A. Adjustable nozzles
 - B. Solid-stream nozzles
 - C. Combination (fog) nozzles
 - D. Straight- and solid-stream nozzles
- _____ 5. Class B fires are those that involve: (773)
- A. combustible metals.
 - B. ordinary combustibles.
 - C. energized electrical equipment.
 - D. flammable and combustible liquids and gases.
- _____ 6. Flammable liquids are those that have flash points of less than: (773)
- A. 100°F (38°C).
 - B. 200°F (93°C).
 - C. 212°F (100°C).
 - D. 412°F (211°C)
- _____ 7. Which of the following are flammable and combustible liquids that do not mix with water? (773)
- A. Hydrocarbons
 - B. Polar solvents
 - C. Fluorocarbons
 - D. Aqua carbons
- _____ 8. What should be done with PPE soaked with flammable or combustible liquids? (774)
- A. Removed from service and destroyed
 - B. Used only in nonflammable atmospheres
 - C. Removed from service until rinsed with clear water
 - D. Removed from service until cleaned according to manufacturer's recommendations
- _____ 9. Which of the following is NOT an ignition source in a leak area? (774)
- A. Vehicles
 - B. Smoking materials
 - C. Electrical fixtures
 - D. Cell phones and portable radios

- _____ 10. Which of the following is NOT a way in which water is used to control Class B fires? (775-776)
- A. Cooling agent
 - B. Mechanical tool
 - C. Crew protection
 - D. Structure protection
- _____ 11. Which of the following statements about traffic at bulk transport vehicles fires is MOST accurate? (777)
- A. Road flares should be used to alert passers-by of the dangers.
 - B. All lanes of traffic must be closed during initial emergency operations.
 - C. Fire apparatus should be positioned downhill and downwind of the incident.
 - D. Firefighters should exit the apparatus and work from the side away from traffic.
- _____ 12. Natural gas is explosive in concentrations between ____ percent in air. (778)
- A. 1 and 10
 - B. 5 and 15
 - C. 10 and 25
 - D. 15 and 30
- _____ 13. Which of the following is the most widely used liquefied petroleum gas (LPG)? (779)
- A. Ethane
 - B. Butane
 - C. Propane
 - D. Methane
- _____ 14. Which of the following is NOT one of the questions to be asked during a rapid initial assessment of a structure fire? (788)
- A. Are there exposures threatened by the fire?
 - B. Are there occupants in need of immediate rescue?
 - C. Are there sufficient numbers of hydrants in the area?
 - D. Are only the contents involved or is the structure burning?
- _____ 15. Which of the following is a function of the fireground support company? (790)
- A. Preventing fire extension
 - B. Performing forcible entry
 - C. Assisting in extinguishment
 - D. Backing up the initial attack line