1. 3967 Ref: Firefighting, Attack, Above A
When fighting a large fire on your vessel and attacking it from ABOVE the space on fire, it is important to _____.
A. rotate personnel, due to heat stress
B. station personnel on the hot deck immediately above the fire
C. stay low by crouching or kneeling on deck
D. All of the above

2. 3968 Ref: Firefighting, Attack, Above B
When fighting a large fire on your vessel and attacking it from ABOVE the space on fire, it is important to _____.
A. not rotate personnel, as the consistent attack can extinguish the fire quickly.
B. stand erect, to avoid the heat of the deck
C. station personnel on the hot deck, immediately above the fire, to observe for its potential spread
D. All of the above

3. 3969 Ref: Firefighting, Attack, Above D
When fighting a large fire on your vessel and attacking it from ABOVE the space on fire, it is important to _____.
A. rotate personnel, due to heat stress
B. stand erect, to avoid the heat of the deck
C. cool the deck directly above the space on fire
D. All of the above

4. 893 Ref: Firefighting, Attack, Control B
Control of fire should be addressed _____.
A. immediately after restoring vital services
B. immediately
C. following control of flooding
D. following establishment of fire boundaries

5. 3971 Ref: Firefighting, Attack, Cooling B
When fighting fires in spaces containing bottles of LPG (liquefied petroleum gas), you should _____.
A. attempt to isolate the fire from the LPG
B. cool the bottles or remove them from the fire area
C. see that the valves on all LPG bottles are closed
D. place insulating material over the bottles

6. 3245 Ref: Firefighting, Attack, Indirect B
The success of an indirect attack on a fire depends on the _____.
A. size of the fire when initially observed
B. complete containment of the fire
C. cooling ability of the firefighting agent
D. class of the fire

7. 4257 Ref: Firefighting, Attack, Indirect C
Which firefighting method is an example of an indirect attack on a fire?
A. Bouncing a straight stream of water off the overhead to create spray effect
B. Spraying foam on a bulkhead and letting it flow down and over a pool of burning oil
C. Flooding a paint locker with CO2 and sealing the compartment
D. Cooling adjacent bulkheads with water to prevent the spread of the fire by conduction

8. 113 Ref: Firefighting, Attack, Notification B
A fire starts on your vessel while refueling. You should FIRST _____.
A. stop the ventilation
B. sound the general alarm
C. determine the source of the fire
D. attempt to extinguish the fire

9. 1351 Ref: Firefighting, Attack, Notification B
If there's a fire aboard your vessel, you should FIRST _____.
A. notify the Coast Guard
B. sound the alarm
C. have passengers put on life preservers
D. cut off air supply to the cut off air supply to the fire

10. 3827 Ref: Firefighting, Attack, Notification A
What should be your FIRST action if you discover a fire aboard ship?
A. Sound the alarm.
B. Attempt to put out the fire.
C. Confine it by closing doors, ports, vents, etc.
D. Call the Master.

11. 4840 Ref: Firefighting, Attack, Notification C
You are on watch at night in port and discover a fire in #1 hatch. Which action should you take FIRST?
A. Advise the Chief Mate and Master.
B. Release carbon dioxide into the hatch.
C. Sound the general alarm.
D. Lead a fire hose to the hatch.

12. 4841 Ref: Firefighting, Attack, Notification D
You are on watch at sea, at night, when the ordinary seaman reports a fire in number five upper 'tween deck. Which of the following should NOT be done immediately?
A. Sound the general alarm
B. Secure mechanical cargo hold ventilation
C. Call for water on deck
D. Release carbon dioxide into the affected compartment

13. 4932 Ref: Firefighting, Attack, Notification D
You detect an odor of burning cotton fabric and then see smoke coming from the top of an open laundry room doorway. After activating the fire alarm, you might do any of the following next, EXCEPT _____.
A. begin breaking out the nearest fire hose
B. secure ventilation to the room
C. close the door to the room
D. acquire the nearest self contained breathing apparatus

14. 4933 Ref: Firefighting, Attack, Notification D
You detect an odor of burning electrical insulation and then notice smoke coming from an open laundry room doorway. After activating the fire alarm, which of the following is the LEAST likely of your next actions?
A. Close the door to the room.
B. Locate the nearest CO2 or dry chemical extinguisher.
C. Secure power to the washers and dryers.
D. Break out the nearest fire hose.

15. 5009 Ref: Firefighting, Attack, Notification A
You notice smoke coming from an open laundry room doorway. After activating the fire alarm, which of the following would you do FIRST?
A. Attempt to determine what is burning.
B. Acquire the nearest self contained breathing apparatus.
C. Break out the nearest fire hose.
D. Wait for the fire team to arrive and assist as directed.

16. 1942 Ref: Firefighting, Attack, Overhaul A
Overhauling a fire in the living quarters on a vessel must include _____.
A. opening dead spaces to check for heat or fire
B. evacuation of the vessel
C. sounding the "all clear" signal
D. operation of the emergency generator

17. 3574 Ref: Firefighting, Attack, Overhaul D
What is meant by the term "overhaul" in firefighting?
A. Slow down the spread of fire by cooling adjacent structures
B. Cover the fire with foam
C. Smother the fire with a blanket or similar object
D. Break up solid objects to ensure that any deep seated fires are extinguished

18. 108 Ref: Firefighting, Attack, Remove fuel C
A fire of escaping liquefied flammable gas is best extinguished by _____.
A. cooling the gas below the ignition point
B. cutting off the supply of oxygen
C. stopping the flow of gas
D. interrupting the chain reaction

19. 128 Ref: Firefighting, Attack, Remove fuel D
A fuel line breaks, sprays fuel on the hot exhaust manifold, and catches fire. Your FIRST action should be to _____.
A. batten down the engine room
B. start the fire pump
C. apply carbon dioxide to the fire
D. shut off the fuel supply

20. 1369 Ref: Firefighting, Attack, Remove fuel B
If you have a fire in the engine room, your FIRST act should be to _____.
A. discharge the fixed CO2 system into the engine room
B. secure the fuel supply and ventilation to the engine room
C. maneuver your vessel into the wind
D. have all of your crew get into the liferaft

21. 1703 Ref: Firefighting, Attack, Remove fuel A
Oil fires are best extinguished by _____.
A. Cutting off the supply of oxygen
B. removing the fuel
C. cooling below the ignition temperature
D. spraying with water

22. 4029 Ref: Firefighting, Attack, Remove fuel B
When possible, what is the FIRST step in fighting an engine fuel-pump fire which results from a broken fuel line?
A. Secure all engine room doors, hatches, and vents.
B. Close the fuel line valve.
C. Check the spread of the fire with foam.
D. Cast the barge off the wharf.

23. 4030 Ref: Firefighting, Attack, Remove fuel D
When possible, what should be the FIRST step in combating a fire on deck resulting from a cargo overflow or a leaking cargo line?
A. Blanket the cargo spill with foam.
B. Prevent the spread of fire with a foam dam.
C. Apply CO2 on burning fuel at its source.
D. Shut off the transfer of cargo.

24. 1052 Ref: Firefighting, Class A
Fires are grouped into what categories?
A. Class A, B, C, and D
B. Type 1, 2, 3, and 4
C. Combustible solids, liquids, and gases
D. Flammable solids, liquids, and gases

25. 97 Ref: Firefighting, Class, A A
A fire in a pile of canvas is classified as class _____.
A. A
B. B
C. C
D. D

26. 98 Ref: Firefighting, Class, A A
A fire in a pile of dunnage would be classified as class _____.
A. A
B. B
C. C
D. D

27. 99 Ref: Firefighting, Class, A A
A fire in a pile of linen is a class _____.
A. A
B. B
C. C
D. D

28. 104 Ref: Firefighting, Class, A A
A fire in trash and paper waste is classified as class _____.
A. A
B. B
C. C
D. D

29. 385 Ref: Firefighting, Class, A A
A stored-pressure water extinguisher is most effective against fires of class _____.
A. A
B. B
C. C
D. D

30. 836 Ref: Firefighting, Class, A A
Burning wood is which class of fire?
A. A
B. B
C. C
D. D

31. 50 Ref: Firefighting, Class, B A
A class B fire is most successfully fought by _____.
A. preventing oxygen from reaching the burning material
B. cooling the burning material below its ignition temperature
C. using the extinguishing agent to make the burning material fire-resistant
D. using the extinguishing agent to absorb the heat

32. 132 Ref: Firefighting, Class, B B
A galley grease fire would be classified as which class of fire?
A. A
B. B
C. C
D. D

33. 717 Ref: Firefighting, Class, B B
An oil fire is classified as class _____.
A. A
B. B
C. C
D. D

34. 718 Ref: Firefighting, Class, B C
An oil fire is classified as class _____.
A. D
B. C
C. B
D. A

35. 1311 Ref: Firefighting, Class, B D
If ignited, which material would be a class B fire?
A. Magnesium
B. Paper
C. Wood
D. Diesel Oil

36. 2206 Ref: Firefighting, Class, B B
The class of fire on which a blanketing effect is essential is class _____.
A. A
B. B
C. C
D. D

37. 51 Ref: Firefighting, Class, C D
A class C fire would be burning _____.
A. fuel oil
B. wood
C. celluloid
D. electrical insulation

38. 100 Ref: Firefighting, Class, C C
A fire in a transformer terminal would be classified as class _____.
A. A
B. B
C. C
D. D

39. 103 Ref: Firefighting, Class, C C
A fire in the radio transmitter would be of what class?
A. A
B. B
C. C
D. D

40. 112 Ref: Firefighting, Class, C C
A fire starts in a switchboard due to a short circuit. This is which class of fire?
A. A
B. B
C. C
D. D

41. 696 Ref: Firefighting, Class, C C
An important step in fighting any electrical fire is to _____.
A. stop ventilation
B. stop the vessel
C. de-energize the circuit
D. apply water to extinguish the fire

42. 730 Ref: Firefighting, Class, C D
Any extinguishing agent used on a Class "C" fire must have which important property?
A. Cooling ability
B. Leaves no residue
C. Penetrating power
D. Nonconductivity

43. 1056 Ref: Firefighting, Class, C C
Fires which occur in energized electrical equipment, such as switchboard insulation, are class _____.
A. A
B. B
C. C
D. D

44. 3706 Ref: Firefighting, Class, C B
What is the MOST important consideration when determining how to fight an electrical fire?
A. Whether the fire is in machinery or passenger spaces
B. Danger of shock to personnel
C. The amount of toxic fumes created by the extinguisher
D. Maintaining electrical power

45. 3722 Ref: Firefighting, Class, C B
What is the primary hazard, other than fire damage, associated with a class C fire?
A. Possibility of reflash
B. Electrocution or shock
C. Explosion
D. Flashover

46. 191 Ref: Firefighting, Class, D D
A magnesium fire is classified as class _____.
A. A
B. B
C. C
D. D

47. 678 Ref: Firefighting, Class, D D
An aluminum powder fire is classified as class _____.
A. A
B. B
C. C
D. D

48. 1053 Ref: Firefighting, Class, D D
Fires in combustible metals, such as sodium or magnesium, are classified as class _____.
A. A
B. B
C. C
D. D

49. 1054 Ref: Firefighting, Class, Engine Room B
Fires of which class would most likely occur in the engine room of a vessel?
A. Classes A and B
B. Classes B and C
C. Classes C and D
D. Classes A and D

50. 4515 Ref: Firefighting, CO C
Which toxic gas is a product of incomplete combustion, and is often present when a fire burns in a closed compartment?
A. Carbon dioxide
B. Hydrogen sulfide
C. Carbon monoxide
D. Nitric oxide

51. 4878 Ref: Firefighting, CO2 Flood, Closed and Airtight C
You are releasing carbon dioxide gas (CO2) into an engine compartment to extinguish a fire. The CO2 will be most effective if the _____.
A. compartment is closed and ventilators are opened
B. compartment is left open to the air
C. compartment is closed and airtight
D. air flow to the compartment is increased with blowers

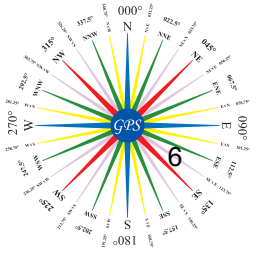
52. 1543 Ref: Firefighting, CO2 Flood, Engine Room A
In the event of fire in a machinery space, _____.
A. the fixed carbon dioxide system should be used only when all other means of extinguishment have failed
B. the fixed carbon dioxide system should be used immediately, as it is the most efficient means of extinguishment
C. water in any form should not be used as it will spread the fire
D. the space should be opened 5 minutes after flooding CO2 to prevent injury to personnel

53. 72 Ref: Firefighting, CO2 Flood, Low Pressure B
A crew member reports that the high-pressure alarm light of a low-pressure CO2 fixed fire extinguishing system is illuminated. The most probable cause of this condition would be that _____.
A. an air leak has developed in the tank
B. the tank cooling system has malfunctioned
C. the pilot cylinder discharge valve is leaking
D. an excessive amount of insulation has been installed on the tank and piping

54. 2824 Ref: Firefighting, CO2 Flood, Low Pressure C
The normal designed CO2 storage tank temperature and pressure associated with a ship's low-pressure CO2 fixed fire extinguishing system is approximately _____.
A. 0°F at 50 PSI
B. 70°F at 150 PSI
C. 0°F at 300 PSI
D. 70°Fat 500 PSI

55. 3849 Ref: Firefighting, CO2 Flood, Low Pressure A
What would be a major consequence of the refrigeration system for a low-pressure CO2 fixed fire extinguishing system remaining inoperable?
A. The entire charge might eventually be lost due to CO2 venting out through the relief valve.
B. Liquid CO2 would vent out through the safety valve as the temperature increases.
C. Excessive condensation inside the tank would freeze, causing a restriction in the discharge piping.
D. The warmed charge of CO2 would not be effective in extinguishing a fire.

56. 3891 Ref: Firefighting, CO2 Flood, Low Pressure D
When a ship's low-pressure CO2 fixed fire extinguishing system is activated from a remote location, what determines the quantity of CO2 being released into a selected space?
A. The number of discharge nozzles in the space determines the quantity released.
B. The discharge will continue until the temperature of the space returns to its normal ambient temperature.
C. The main CO2 tank is partitioned into sections that are individually designated for each of the protected spaces.
D. A pneumatic timer controls each discharge selector valve, and is preset for each space.



57. 2963 Ref: Firefighting, CO2 Flood, Safety Disc D
The safety discs on carbon dioxide cylinders are set to release at 2,700 psi. Under normal circumstances this pressure will be reached at a temperature of _____.
A. 70°F
B. 100°F
C. 125°F
D. 135°F

58. 1061 Ref: Firefighting, CO2 Flood, Stop Valve, Pull Cylinder B
Fixed carbon dioxide extinguishing systems, for machinery spaces that are normally manned, are actuated by one control to open the stop valve in the line leading to the space, and _____.
A. the same control releasing the CO2
B. a separate control to release the CO2
C. two separate controls to release the CO2
D. three separate controls to release the CO2

59. 1427 Ref: Firefighting, CO2 Flood, Stop Valve, Pull Cylinder B
In a fixed carbon dioxide extinguishing system for a machinery space, designed WITH a stop valve in the line leading to the protected space, the flow of CO2 is established by actuating _____.
A. one control
B. two controls
C. three controls
D. none of the above

60. 2180 Ref: Firefighting, CO2 Flood, Stop Valve, Pull Cylinder A
The C02 flooding system is actuated by a sequence of steps which are _____.
A. break glass, pull valve, break glass, pull cylinder control
B. sound evacuation alarm, pull handle
C. open bypass valve, break glass, pull handle
D. open stop valve, open control valve, trip alarm

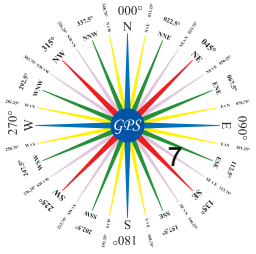
61. 3316 Ref: Firefighting, Damage Control A
The wooden plug fitted tightly in the vent of a damaged tank may prevent the tank from _____.
A. filling completely
B. developing free surfaces
C. developing free surface moments
D. collapsing

62. 111 Ref: Firefighting, Definition, Auto Ignition C
A fire starting by spontaneous combustion can be expected in which condition?
A. Paints, varnish, or other liquid flammables are stowed in a dry stores locker.
B. Inert cargoes such as pig iron are loaded in a wet condition.
C. Oily rags are stowed in a metal pail.
D. Clean mattresses are stored in contact with an electric light bulb.

63. 1705 Ref: Firefighting, Definition, Auto Ignition B
Oily rags stored in a pile that is open to the atmosphere are a hazard because they may _____.
A. deteriorate and give off noxious gasses
B. spontaneously heat and catch fire
C. attract lice and other vermin and serve as a breeding ground
D. None of the above

64. 2080 Ref: Firefighting, Definition, Auto Ignition C
Spontaneous combustion is caused by _____.
A. an outside heat source heating a substance until it ignites
B. conduction of heat through a wall of material to the substance
C. chemical action within a substance
D. All of the above

65. 2081 Ref: Firefighting, Definition, Auto Ignition A
Spontaneous combustion is most likely to occur in _____.
A. rags soaked in linseed oil
B. overloaded electrical circuits
C. dirty swabs and cleaning gear
D. partially loaded fuel tanks



66. 2082 Ref: Firefighting, Definition, Auto Ignition B
Spontaneous ignition can result from _____.
A. an unprotected drop-light bulb
B. careless disposal or storage of material
C. smoking in bed
D. worn electrical wires on power tools

67. 4496 Ref: Firefighting, Definition, Auto Ignition D
Which substance might be subject to spontaneous combustion?
A. Coal
B. Scrap rubber
C. Leather
D. All of the above

68. 4988 Ref: Firefighting, Definition, LEL/UEL A
You have been carrying a liquid with flammable limits of 1% to 7% mixture with air. If your instructions say that no one shall enter the tank if the vapor concentration is over 15% of the LEL, what is the maximum allowable percentage of vapors for men to enter?
A. 0.0015
B. 0.0085
C. 0.0105
D. 0.07

69. 652 Ref: Firefighting, Definition, Oxygen D
Ambient air, which you normally breathe, contains what percent of oxygen?
A. 0.06
B. 0.1
C. 0.15
D. 0.21

70. 1694 Ref: Firefighting, Definition, Oxygen C
Normally, the percentage of oxygen in air is _____.
A. 0.16
B. 0.18
C. 0.21
D. 0.25

71. 3664 Ref: Firefighting, Definition, Oxygen C
What is the maximum oxygen content below which flaming combustion will no longer occur?
A. 0.01
B. 0.1
C. 0.15
D. 0.21

72. 3717 Ref: Firefighting, Definition, Oxygen D
What is the percentage of oxygen in a typical sample of uncontaminated air?
A. 12 percent
B. 15 percent
C. 18 percent
D. 21 percent

73. 5019 Ref: Firefighting, Definition, Oxygen B
You will extinguish a fire when you remove _____.
A. nitrogen
B. oxygen
C. sodium
D. carbon dioxide

74. 635 Ref: Firefighting, Definition, Triangle A
All of the following are part of the fire triangle EXCEPT _____.
A. electricity
B. fuel
C. oxygen
D. heat

75. 1018 Ref: Firefighting, Definition, Triangle A
Except in rare cases, it is impossible to extinguish a shipboard fire by _____.
A. removing the fuel
B. interrupting the chain reaction
C. removing the oxygen
D. removing the heat

76. 3031 Ref: Firefighting, Definition, Triangle B
The spread of fire is prevented by _____.
A. cooling surfaces cooling surfaces adjacent to the fire
B. removing combustibles from the endangered area
C. shutting off the oxygen supply
D. All of the above

77. 3601 Ref: Firefighting, Definition, Triangle B
What is required in addition to the heat, fuel, and oxygen of the fire triangle to have a fire?
A. Electricity
B. Chain reaction
C. Pressure
D. Smoke

78. 3858 Ref: Firefighting, Definition, Triangle C
What, when removed, will result in the extinguishment of a fire?
A. Nitrogen
B. Sodium
C. Oxygen
D. Carbon dioxide

79. 1029 Ref: Firefighting, Detection B
Fire alarm system thermostats are actuated by _____.
A. smoke sensors
B. the difference in thermal expansion of two dissimilar metals
C. pressure loss due to air being heated
D. an electric eye which actuates when smoke interferes with the beam

80. 4254 Ref: Firefighting, Detection B
Which fire detection system is actuated by sensing a heat rise in a compartment?
A. Manual fire detection system
B. Automatic fire detection system
C. Smoke detection system
D. Watchman's supervisory system

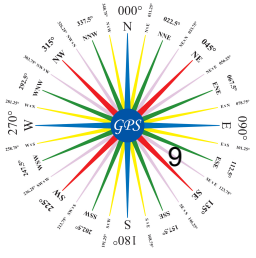
81. 4534 Ref: Firefighting, Extinguisher D
Which types of portable fire extinguishers are designed for putting out electrical fires?
A. Foam and water (stored pressure)
B. Foam and carbon dioxide
C. Foam and dry chemical
D. Dry chemical and carbon dioxide

82. 4535 Ref: Firefighting, Extinguisher A
Which types of portable fire extinguishers are designed for use on electrical fires?
A. Dry chemical and carbon dioxide
B. Foam (stored pressure) and soda-acid
C. Carbon dioxide and foam (stored pressure)
D. Dry chemical and soda-acid

83. 30 Ref: Firefighting, Extinguisher, CO2 B
A carbon dioxide fire extinguisher should be recharged _____.
A. at least annually
B. whenever it is below its required weight
C. only if the extinguisher has been used
D. before every safety inspection

84. 77 Ref: Firefighting, Extinguisher, CO2 C
A deck-stowed 40-foot container is giving off smoke, and one end is discolored from heat. The cargo is valuable and easily damaged by water. You want to extinguish the fire without further damage if possible. What action should you take?
A. Connect a portable line from the ship's fixed system and discharge CO2 into the container.
B. Flood the container with water and disregard any cargo damage as the fire threatens the entire vessel.
C. Pierce the container and discharge 6 or more portable CO2's then add more CO2 hourly.
D. Cool the exterior of the container with water and close all vents; then keep it cooled until it can be off-loaded.

85. 383 Ref: Firefighting, Extinguisher, CO2 A
A squeeze-grip type carbon dioxide portable fire extinguisher has been partially discharged. It should be _____.
A. labeled empty and recharged as soon as possible
B. replaced in its proper location if weight loss is no more than 25%
C. replaced in its proper location regardless of weight
D. replaced in its proper location if weight loss is no more than 15%



86. 616 Ref: Firefighting, Extinguisher, CO2 D
After using a C02 portable extinguisher, it should be _____.
A. put back in service if some C02 remains
B. hydrostatically tested
C. retagged
D. recharged

87. 1174 Ref: Firefighting, Extinguisher, CO2 D
How do you operate a portable CO2 fire extinguisher?
A. Point the horn down.
B. Turn cylinder upside-down.
C. Break the rupture disc.
D. Pull pin, squeeze grip.

88. 1460 Ref: Firefighting, Extinguisher, CO2 B
In continuous operation, the effective range of the 15 pound CO2 extinguisher is limited to _____.
A. 2 to 4 feet
B. 3 to 8 feet
C. 9 to 12 feet
D. 10 to 15 feet

89. 1497 Ref: Firefighting, Extinguisher, CO2 C
In order to discharge a CO2 portable fire extinguisher, the operator must FIRST _____.
A. invert the CO2 extinguisher
B. squeeze the two trigger handles together
C. remove the locking pin
D. open the discharge valve

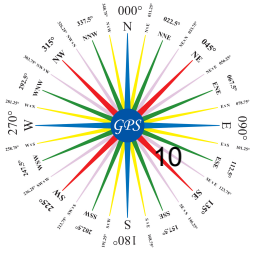
90. 1960 Ref: Firefighting, Extinguisher, CO2 D
Portable CO2 fire extinguishers should NOT be used to inert a space containing flammable liquids due to the danger of _____.
A. the CO2 being inhaled by personnel
B. reflash of burning liquids
C. vapor condensation on the extinguisher
D. the discharge causing a static spark

91. 3358 Ref: Firefighting, Extinguisher, CO2 A
To operate a portable CO2 extinguisher continuously in the discharge mode _____.
A. slip the "D yoke" ring in the lower handle over the upper handle
B. reinsert the locking pin
C. open the discharge valve
D. invert the CO2 extinguisher

92. 3945 Ref: Firefighting, Extinguisher, CO2 B
When discharging a portable CO2 fire extinguisher, you should NOT hold the horn of the extinguisher because the horn _____.
A. becomes extremely hot
B. becomes extremely cold
C. could come off in your hands
D. is placed directly in the flames

93. 3966 Ref: Firefighting, Extinguisher, CO2 A
When fighting a fire on a bulkhead using a portable carbon dioxide extinguisher, the stream should be directed at the _____.
A. base of the flames, moving the horn from side to side, following the flames upward as they diminish
B. top of the flaming area, moving the horn from side to side, following the flames downward as they diminish
C. center of the flaming area, moving the horn vertically from top to bottom
D. bottom of the flaming area, moving the horn vertically to the top following the flames upward as they diminish

94. 4288 Ref: Firefighting, Extinguisher, CO2 C
Which is the proper method of determining whether a portable CO2 fire extinguisher needs recharging?
A. Check the tag to see when the extinguisher was last charged.
B. Release a small amount of CO2; if the CO2 discharges, the extinguisher is acceptable.
C. Weigh the extinguisher and compare the weight against that stamped on the valve.
D. Recharge the extinguisher at least once each year.



95. 4351 Ref: Firefighting, Extinguisher, CO2 D
Which portable fire extinguisher is normally recharged in a shore facility?
A. Dry chemical (cartridge-operated)
B. Water (cartridge-operated)
C. Water (pump tank)
D. Carbon dioxide

96. 4353 Ref: Firefighting, Extinguisher, CO2 A
Which portable fire extinguisher should be used on a class C fire on board a vessel?
A. Carbon dioxide
B. Water (stored pressure)
C. Foam
D. Carbon tetrachloride

97. 4760 Ref: Firefighting, Extinguisher, CO2 A
You are having a Coast Guard inspection. All carbon dioxide fire extinguishers aboard will be _____.
A. weighed
B. discharged and recharged
C. checked for pressure loss
D. sent ashore to an approved service facility

98. 4928 Ref: Firefighting, Extinguisher, CO2 D
You can determine that a CO2 fire extinguisher is fully charged by _____.
A. looking at the gauge
B. checking the nameplate data
C. weighing by hand
D. weighing on a properly calibrated scale

99. 267 Ref: Firefighting, Extinguisher, Dry Chemical B
A portable dry chemical fire extinguisher discharges by _____.
A. gravity when the extinguisher is turned upside down
B. pressure from a small CO2 cartridge on the extinguisher
C. air pressure from the hand pump attached to the extinguisher
D. pressure from the reaction when water is mixed with the chemical

100. 921 Ref: Firefighting, Extinguisher, Dry Chemical D
Dry chemical extinguishers extinguish class B fires to the greatest extent by _____.
A. cooling
B. smothering
C. oxygen dilution
D. breaking the chain reaction

101. 1995 Ref: Firefighting, Extinguisher, Dry Chemical B
Recharging a previously used cartridge-operated dry-chemical extinguisher is accomplished by _____.
A. authorized fire equipment servicing personnel only
B. replacing the propellant cartridge and refilling with powder
C. puncturing the cartridge seal after installation
D. recharging the cartridge and refilling it with powder

102. 3557 Ref: Firefighting, Extinguisher, Dry Chemical D
What is an advantage of a dry chemical extinguisher as compared to a carbon dioxide extinguisher?
A. It has a greater duration.
B. It provides a heat shield for the operator.
C. It is nontoxic.
D. It offers lasting, effective protection against burn-back.

103. 3956 Ref: Firefighting, Extinguisher, Dry Chemical A
When electrical equipment is involved in a fire, the stream of dry chemicals should be _____.
A. aimed at the source of the flames
B. fogged above the equipment
C. shot off a flat surface onto the flames
D. used to shield against electrical shock

104. 4170 Ref: Firefighting, Extinguisher, Dry Chemical A
Which action is routinely performed at the annual servicing and inspection of a dry-chemical cartridge-operated portable fire extinguisher?
A. Insure the chemical is powdery.
B. Replace the cartridge.
C. Pressure test the discharge hose.
D. Test the pressure gauge for proper operation.

105. 4171 Ref: Firefighting, Extinguisher, Dry Chemical B
Which action is routinely performed at the annual servicing and inspection of a dry-chemical cartridge-operated portable fire extinguisher?
A. Test the pressure gauge for correct reading.
B. Weigh the cartridge.
C. Replace the dry chemical.
D. Pressure test the discharge hose.

106. 4489 Ref: Firefighting, Extinguisher, Dry Chemical A
Which statement(s) is(are) TRUE concerning the use of dry chemical extinguishers?
A. You should direct the spray at the base of the fire.
B. You should direct the spray directly into the fire.
C. You should direct the spray at a vertical bulkhead and allow it to flow over the fire.
D. All of the above

107. 4753 Ref: Firefighting, Extinguisher, Dry Chemical B
You are fighting a class "B" fire with a portable dry chemical extinguisher. The discharge should be directed _____.
A. to bank off a bulkhead onto the fire
B. at the seat of the fire, starting at the near edge
C. over the top of the fire
D. at the main body of the fire

108. 4754 Ref: Firefighting, Extinguisher, Dry Chemical A
You are fighting a class "B" fire with a portable dry chemical extinguisher. The discharge should be directed _____.
A. at the seat of the fire, starting at the near edge
B. to bank off a bulkhead onto the fire
C. over the top of the fire
D. at the main body of the fire

109. 641 Ref: Firefighting, Extinguisher, Portable A
All portable fire extinguishers must be capable of being _____.
A. carried by hand to a fire
B. carried or rolled to a fire
C. recharged in the field
D. used on class "B" fires

110. 642 Ref: Firefighting, Extinguisher, Portable A
All portable fire extinguishers must be capable of being _____.
A. carried by hand to a fire
B. carried or rolled to a fire
C. recharged in the field
D. used on class "B" fires

111. 2064 Ref: Firefighting, Extinguisher, Portable A
Size I and II fire extinguishers are designated as _____.
A. portable
B. semi-portable
C. fixed
D. compact

112. 1033 Ref: Firefighting, Extinguisher, Semi-portable B
Fire extinguishers of sizes III, IV, and V are designated as _____.
A. portable
B. semi-portable
C. fixed
D. disposable

113. 2065 Ref: Firefighting, Extinguisher, Semi-portable D
Size III, IV, and V extinguishers are considered _____.
A. hand portable
B. all purpose
C. fixed extinguishers
D. semi-portable

114. 4527 Ref: Firefighting, Extinguisher, Water B
Which type of portable fire extinguishers is NOT designed for use on flammable liquid fires?
A. Foam (stored-pressure)
B. Water (cartridge-operated)
C. Dry chemical
D. Carbon dioxide

115. 4528 Ref: Firefighting, Extinguisher, Water C
Which type of portable fire extinguishers is NOT designed for use on flammable liquid fires?
A. Foam
B. Dry chemical
C. Water (cartridge-operated)
D. Carbon dioxide

116. 4222 Ref: Firefighting, Extinguisher, D
Which extinguishing agent is suitable to combat a class B fire in an engine compartment?
A. Carbon dioxide
B. Dry chemical
C. Foam
D. All of the above

117. 101 Ref: Firefighting, Extinguishing Agent, CO2 D
A fire in electrical equipment should be extinguished by using _____.
A. salt water
B. foam
C. low-velocity fog
D. CO2

118. 598 Ref: Firefighting, Extinguishing Agent, CO2 B
After extinguishing a fire with CO2, it is advisable to _____.
A. use all CO2 available to cool the surrounding area
B. stand by with water or other agents
C. thoroughly ventilate the space of CO2
D. jettison all burning materials

119. 808 Ref: Firefighting, Extinguishing Agent, CO2 D
Before using a fixed CO2 system to fight an engine room fire, you must _____.
A. secure the engine room ventilation
B. secure the machinery in the engine room
C. evacuate all engine room personnel
D. All of the above

120. 852 Ref: Firefighting, Extinguishing Agent, CO2 A
Carbon dioxide as a fire fighting agent has which advantage over other agents?
A. It causes minimal damage.
B. It is safer for personnel.
C. It is cheaper.
D. It is most effective on a per unit basis.

121. 874 Ref: Firefighting, Extinguishing Agent, CO2 B
CO2 extinguishes a fire by _____.
A. cooling
B. smothering
C. chemical action
D. All of the above

122. 1040 Ref: Firefighting, Extinguishing Agent, CO2 B
Fire in an engine compartment is best extinguished with carbon dioxide gas (CO2) and by _____.
A. closing the compartment except for the ventilators
B. completely closing the compartment
C. leaving the compartment open to the air
D. increasing the air flow to the compartment by blowers

123. 1063 Ref: Firefighting, Extinguishing Agent, CO2 B
Fixed CO2 systems would not be used on crew's quarters or _____.
A. the paint locker
B. spaces open to the atmosphere
C. cargo holds
D. the engine room

124. 1451 Ref: Firefighting, Extinguishing Agent, CO2 A
In areas where CO2 piping is installed, such piping may not be used for any other purpose EXCEPT _____.
A. in connection with the fire-detecting system
B. in connection with the water sprinkler system
C. to ventilate the space
D. to run the emergency wiring to the space

125. 1621 Ref: Firefighting, Extinguishing Agent, CO2 C
Large volumes of carbon dioxide are safe and effective for fighting fires in enclosed spaces, such as in a pumproom, provided that the _____.
A. persons in the space wear gas masks
B. persons in the space wear damp cloths over their mouths and nostrils
C. ventilation system is secured and all persons leave the space
D. ventilation system is kept operating

126. 2335 Ref: Firefighting, Extinguishing Agent, CO2 C
The danger associated with using carbon dioxide in an enclosed space is _____.
A. frostbite
B. skin burns
C. asphyxiation
D. an explosive reaction

127. 2579 Ref: Firefighting, Extinguishing Agent, CO2 A
The extinguishing agent most likely to allow reignition of a fire is _____.
A. carbon dioxide
B. foam
C. water fog
D. water stream

128. 3319 Ref: Firefighting, Extinguishing Agent, CO2 A
There are two disadvantages to CO2 as a firefighting agent. One of these is the limited quantity available, and the other is _____.
A. the lack of cooling effect on heated materials
B. that it cannot be used in a dead ship situation with no electrical power to the CO2 pump
C. that it breaks down under extreme heat to form poisonous gases
D. there is no effect on a class A fire even in an enclosed space

129. 3576 Ref: Firefighting, Extinguishing Agent, CO2 A
What is NOT a characteristic of carbon dioxide fire-extinguishing agents?
A. Effective even if ventilation is not shut down
B. Will not deteriorate in storage
C. Non-corrosive
D. Effective on electrical equipment

130. 4109 Ref: Firefighting, Extinguishing Agent, CO2 A
When used to fight fire, carbon dioxide _____.
A. is effective if used promptly on an oil fire
B. has a greater cooling effect than water
C. is lighter than air
D. is harmless to cargo and crew

131. 4200 Ref: Firefighting, Extinguishing Agent, CO2 D
Which danger exists to people when CO2 is discharged into a small enclosed space?
A. Damaged eardrums
B. Electric shock
C. Frostbite
D. Respiratory arrest

132. 4220 Ref: Firefighting, Extinguishing Agent, CO2 A
Which extinguishing agent is most likely to allow reflash as a result of not cooling the fuel below its ignition temperature?
A. CO2
B. Water stream
C. Water spray
D. Foam

133. 4223 Ref: Firefighting, Extinguishing Agent, CO2 B
Which extinguishing agent is the best for use on electrical fires?
A. Foam
B. CO2
C. Dry chemical
D. Water fog

134. 4417 Ref: Firefighting, Extinguishing Agent, CO2 D
Which statement concerning carbon dioxide is FALSE?
A. It displaces the oxygen in the air.
B. It cannot be seen.
C. It cannot be smelled.
D. It is safe to use near personnel in a confined space.

135. 4449 Ref: Firefighting, Extinguishing Agent, CO2 B
Which statement is TRUE concerning carbon dioxide?
A. It is lighter than air.
B. It is an inert gas.
C. It is used mostly on class A fires.
D. All of the above

136. 4450 Ref: Firefighting, Extinguishing Agent, CO2 D
Which statement is TRUE concerning carbon dioxide?
A. It is heavier than air.
B. It is non-conductive.
C. It is used on class B and C fires.
D. All of the above are true.

137. 4670 Ref: Firefighting, Extinguishing Agent, CO2 C
While you are working in a space, the fixed CO2 system is accidentally activated. You should _____.
A. secure the applicators to preserve the charge in the cylinders
B. continue with your work as there is nothing you can do to stop the flow of CO2
C. retreat to fresh air and ventilate the compartment before returning
D. make sure all doors and vents are secured

138. 4692 Ref: Firefighting, Extinguishing Agent, CO2 B
Why is carbon dioxide (CO2) better than dry chemical for fighting a class "C" fire?
A. The dry chemical is a conductor.
B. The dry chemical leaves a residue.
C. CO2 will not dissipate in air.
D. It takes smaller amounts of CO2 to cover the same area.

139. 4758 Ref: Firefighting, Extinguishing Agent, CO2 C
You are fighting a fire in the electrical switchboard in the engine room. You should secure the power, then _____.
A. use a portable foam extinguisher
B. use a low-velocity fog adapter with the fire hose
C. use a portable CO2 extinguisher
D. determine the cause of the fire

140. 669 Ref: Firefighting, Extinguishing Agent, Dry Chemical A
An "ABC" dry chemical fire extinguisher would be LEAST effective against a fire in _____.
A. a mattress
B. spilled liquids such as oil or paint
C. high voltage electrical gear
D. a trash can

141. 674 Ref: Firefighting, Extinguishing Agent, Dry Chemical B
An advantage of an ABC dry chemical over a carbon dioxide extinguisher is _____.
A. lack of toxicity
B. the multipurpose extinguishing ability
C. burn-back protection
D. cooling ability

142. 746 Ref: Firefighting, Extinguishing Agent, Dry Chemical C
As compared to carbon dioxide, dry chemical has which advantage?
A. Cleaner
B. Effective on metal fires
C. Greater range
D. More cooling effect

143. 922 Ref: Firefighting, Extinguishing Agent, Dry Chemical D
Dry chemical extinguishers may be used on what class of fires?
A. A only
B. B only
C. B and C only
D. A, B or C as marked on the extinguisher

144. 923 Ref: Firefighting, Extinguishing Agent, Dry Chemical D
Dry chemical fire extinguishers are effective on which type(s) of fire?
A. Burning oil
B. Electrical
C. Paint
D. All of the above

145. 1927 Ref: Firefighting, Extinguishing Agent, Dry Chemical C
One disadvantage of using regular dry chemical (sodium bicarbonate) in firefighting is that _____.
A. it can break down under high heat and emit noxious fumes
B. it will decompose under prolonged storage and lose its effectiveness
C. fire has been known to flash back over the surface of an oil fire
D. it is ineffective in fighting fires in high-voltage electrical equipment

146. 2800 Ref: Firefighting, Extinguishing Agent, Dry Chemical A
The most effective extinguishing action of dry chemical is _____.
A. breaking the chain reaction
B. the CO2 that is formed by heat
C. smothering
D. shielding of radiant heat

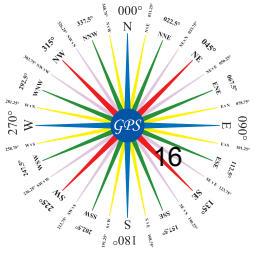
147. 3955 Ref: Firefighting, Extinguishing Agent, Dry Chemical B
When dry chemical extinguishers are used to put out class B fires, there is a danger of reflash because dry chemical_____.
A. is not an effective agent on Class B fires
B. does little or no cooling
C. dissipates quickly
D. is rapidly absorbed by the liquid

148. 4179 Ref: Firefighting, Extinguishing Agent, Dry Chemical C
Which advantage does dry chemical have over carbon dioxide (CO2) in firefighting?
A. Compatible with all foam agents
B. Cleaner
C. More protective against re-flash
D. All of the above

149. 4431 Ref: Firefighting, Extinguishing Agent, Dry Chemical A
Which statement concerning the application of dry chemical powder is FALSE?
A. At temperatures of less than 32°F, the extinguisher must be recharged more often.
B. When possible, the fire should be attacked from windward.
C. The stream should be directed at the base of the fire.
D. Directing the stream into burning flammable liquid may cause splashing.

150. 4433 Ref: Firefighting, Extinguishing Agent, Dry Chemical B
Which statement describes the primary process by which fires are extinguished by dry chemical?
A. The stream of dry chemical powder cools the fire.
B. The dry chemical powder attacks the fuel and oxygen chain reaction.
C. The powder forms a solid coating over the surface.
D. The dry chemical smothers the fire.

151. 1286 Ref: Firefighting, Extinguishing Agent, Dry Powder A
If a powdered aluminum fire is being fought, the correct extinguishing agent would be _____.
A. dry powder
B. water fog
C. CO2
D. steam



152. 4526 Ref: Firefighting, Extinguishing Agent, Dry powder D
Which type of portable fire extinguisher is best suited for putting out a Class D fire?
A. Dry chemical
B. CO2
C. Foam
D. Dry powder

153. 1036 Ref: Firefighting, Extinguishing Agent, Electrical C
Fire extinguishing agents used on Class C fires must be _____.
A. able to absorb heat
B. water based
C. nonconducting
D. nontoxic

154. 3705 Ref: Firefighting, Extinguishing Agent, Electrical C
What is the most important characteristic of the extinguishing agent in fighting a class "C" fire?
A. Weight
B. Temperature
C. Electrical nonconductivity
D. Cost

155. 126 Ref: Firefighting, Extinguishing Agent, Foam B
A foam-type portable fire extinguisher would be most useful in combating a fire in _____.
A. solid materials such as wood or bales of fiber
B. flammable liquids
C. a piece of electrical equipment
D. combustible metallic solids

156. 171 Ref: Firefighting, Extinguishing Agent, Foam B
A large oil fire on the deck of a ship can be fought most effectively with _____.
A. dry chemical
B. foam
C. high-velocity fog
D. Water (cartridge-operated)operated)

157. 268 Ref: Firefighting, Extinguishing Agent, Foam B
A portable foam (stored-pressure type) fire extinguisher would be most useful in combating a fire in _____.
A. generators
B. oil drums
C. the bridge controls
D. combustible metals

158. 673 Ref: Firefighting, Extinguishing Agent, Foam A
An advantage of a dry chemical over a carbon dioxide fire extinguisher is its _____.
A. greater range
B. cooling ability
C. cleanliness
D. All of the above

159. 744 Ref: Firefighting, Extinguishing Agent, Foam A
As an extinguishing agent, foam _____.
A. conducts electricity
B. should be directed at the base of the fire
C. is most effective on burning gases which are flowing
D. extinguishes by cooling oil fires below ignition temperature

160. 885 Ref: Firefighting, Extinguishing Agent, Foam C
Compared to the amount of concentrated foam liquid used, the amount of low expansion mechanical foam produced is _____.
A. 97 times greater
B. 94 times greater
C. 10 times greater
D. 2 times greater

161. 1051 Ref: Firefighting, Extinguishing Agent, Foam D
Firefighting foam is only effective when the foam _____.
A. penetrates to the bottom of the fire
B. is kept saturated with low-velocity water fog
C. mixes with the burning fuel oil
D. completely covers the top of the burning liquid

162. 1066 Ref: Firefighting, Extinguishing Agent, Foam A
Foam extinguishes a fire by _____.
A. smothering the burning material
B. chemical combination with burning material
C. absorbing the burning material
D. organic destruction of the burning material

163. 1067 Ref: Firefighting, Extinguishing Agent, Foam C
Foam extinguishes a fire mainly by _____.
A. cooling
B. chemical action
C. smothering
D. inerting the air

164. 1068 Ref: Firefighting, Extinguishing Agent, Foam A
Foam is a very effective smothering agent and _____.
A. it provides cooling as a secondary effect
B. works well on extinguishing electrical fires
C. can be used to combat combustible metal fires
D. All of the above

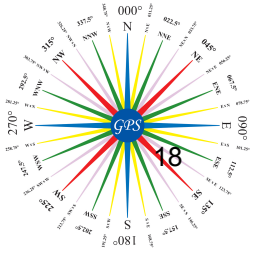
165. 1069 Ref: Firefighting, Extinguishing Agent, Foam C
Foam is effective in combating which class(es) of fire?
A. A
B. B
C. A and B
D. B and C

166. 1178 Ref: Firefighting, Extinguishing Agent, Foam C
How does foam extinguish an oil fire?
A. By cooling the oil below the ignition temperature
B. By removing the fuel source from the fire
C. By excluding the oxygen from the fire
D. By increasing the weight of the oil

167. 1442 Ref: Firefighting, Extinguishing Agent, Foam C
In addition to weighing the cartridge, which other maintenance is required for a cartridge-operated dry chemical extinguisher?
A. Weigh the powder in the canister.
B. Discharge a small amount to see that it works.
C. Check the hose and nozzle for clogs.
D. Check the external pressure gage.

168. 1563 Ref: Firefighting, Extinguishing Agent, Foam B
In the production of chemical foam by a continuous-type generator _____.
A. the maximum water pressure to be used is 50 psi
B. the speed of foam production is slower at lower water temperatures
C. each pound of foam powder produces about 800 gallons of chemical foam
D. fresh water only should be used

169. 1928 Ref: Firefighting, Extinguishing Agent, Foam D
One gallon of high expansion foam solution will produce _____.
A. 8 to 10 gallons of foam
B. 25 to 50 gallons of foam
C. 100 to 200 gallons of foam
D. 500 to 1000 gallons of foam



170. 1929 Ref: Firefighting, Extinguishing Agent, Foam A
One gallon of low expansion foam solution will produce about _____.
A. 10 gallons of foam
B. 25 gallons of foam
C. 100 gallons of foam
D. 500 gallons of foam

171. 1934 Ref: Firefighting, Extinguishing Agent, Foam D
One of the limitations of foam as an extinguishing agent is that foam _____.
A. cannot be made with salt water
B. is heavier than oil and sinks below its surface
C. is corrosive and a hazard to fire fighters
D. conducts electricity

172. 1962 Ref: Firefighting, Extinguishing Agent, Foam A
Portable foam fire-extinguishers are designed for use on class _____.
A. A and class B fires
B. A and class C fires
C. B and class C fires
D. A, class B, and class C fires

173. 1964 Ref: Firefighting, Extinguishing Agent, Foam A
Portable-foam fire extinguishers are designed for use on what classes of fires?
A. A and B
B. A and C
C. B and C
D. A, B, and C

174. 1980 Ref: Firefighting, Extinguishing Agent, Foam D
Production of mechanical foam by a portable in-line foam proportioner _____.
A. increases the size of foam bubbles formed
B. increases the rate of foam production
C. improves the extinguishing properties of foam
D. gives the nozzleman more freedom of movement, since it can be placed anywhere in the hose line

175. 2002 Ref: Firefighting, Extinguishing Agent, Foam D
Regular foam can be used on all but which flammable liquid?
A. Motor gasoline
B. Jet fuel
C. Crude petroleum
D. Alcohol

176. 2162 Ref: Firefighting, Extinguishing Agent, Foam B
The BEST method of applying foam to a fire is to _____.
A. spray directly on the base of the fire
B. flow the foam down a nearby vertical surface
C. sweep the fire with the foam
D. spray directly on the surface of the fire

177. 2891 Ref: Firefighting, Extinguishing Agent, Foam D
The preferred agent used in fighting a helicopter crash fire is _____.
A. CO2
B. dry chemical
C. water
D. foam

178. 3852 Ref: Firefighting, Extinguishing Agent, Foam B
What would be the most effective agent to use to extinguish a fire in drums of flammable liquids stowed on the weather deck of a vessel?
A. Carbon dioxide
B. Foam
C. Steam
D. Water fog

179. 3940 Ref: Firefighting, Extinguishing Agent, Foam C
When compared to a high-expansion foam, a low-expansion foam will _____.
A. be dryer
B. be lighter
C. be more heat resistant
D. cling to vertical surfaces

180. 3941 Ref: Firefighting, Extinguishing Agent, Foam D
When compared to a high-expansion foam, a low-expansion foam will _____.
A. be dryer
B. be lighter
C. be less heat resistant
D. not cling to vertical surfaces

181. 3942 Ref: Firefighting, Extinguishing Agent, Foam A
When compared to low-expansion foam, a high-expansion foam will _____.
A. be drier
B. be heavier
C. be more heat resistant
D. not cling to vertical surfaces

182. 3943 Ref: Firefighting, Extinguishing Agent, Foam B
When compared to low-expansion foam, a high-expansion foam will _____.
A. be wetter
B. be lighter
C. be more heat resistant
D. not cling to vertical surfaces

183. 4016 Ref: Firefighting, Extinguishing Agent, Foam A
When must a dry chemical fire extinguisher be recharged?
A. After each use
B. When the air temperature exceeds 90°F
C. Every 6 months
D. Every 12 months

184. 4124 Ref: Firefighting, Extinguishing Agent, Foam A
When water pressure of 100 psi is used in conjunction with an inline proportioner for the production of the mechanical foam, a 5-gallon can of liquid foam will last _____.
A. 1-1/2 minutes
B. 2-1/2 minutes
C. 5 minutes
D. 15 minutes

185. 4217 Ref: Firefighting, Extinguishing Agent, Foam B
Which extinguishing agent is best for use on a magnesium fire?
A. Water
B. Sand
C. CO2
D. Dry chemical

186. 4391 Ref: Firefighting, Extinguishing Agent, Foam A
Which statement about firefighting foam is TRUE?
A. Foam conducts electricity.
B. To be most effective, foam should be directed at the base of the fire.
C. Foam is most effective on burning liquids which are flowing.
D. Foam can ONLY be used to extinguish class A fires.

187. 4440 Ref: Firefighting, Extinguishing Agent, Foam D
Which statement is TRUE about fire fighting foam?
A. The air bubbles in foam act as an insulator in fighting a class C fire.
B. The effectiveness of foam in forming a blanket over a burning liquid increases as the temperature of the liquid increases.
C. Foam can be used to control gases escaping from compressed gas cylinders.
D. Foam sets up a vapor barrier over a flammable liquid preventing flammable gases from rising.

188. 4469 Ref: Firefighting, Extinguishing Agent, Foam C
Which statement is TRUE concerning the application of foam on an oil fire?
A. It cools the surface of the liquid.
B. It gives protection to fire fighting personnel against the heat of the fire.
C. It forms a smothering blanket on the surface of the oil.
D. It should be used at the same time a solid stream of water is being applied.

189. 4520 Ref: Firefighting, Extinguishing Agent, Foam A
Which type of fire is the foam (stored-pressure type) fire extinguisher effective on?
A. Classes A & B
B. Classes A & C
C. Classes B & C
D. All of the above

190. 4698 Ref: Firefighting, Extinguishing Agent, Foam D
Why should foam be banked off a bulkhead when extinguishing an oil fire?
A. To coat the surrounding bulkheads with foam in case the fire spreads
B. To cool the bulkhead closest to the fire
C. To prevent any oil on the bulkheads from igniting
D. To prevent agitation of the oil and spreading the fire

191. 5084 Ref: Firefighting, Extinguishing Agent, Foam C
Your tankship has 40 gallons of 6% foam concentrate aboard. Approximately how much foam solution can be produced from this supply?
A. 200 gallons
B. 420 gallons
C. 667 gallons
D. 986 gallons

192. 79 Ref: Firefighting, Extinguishing Agent, Water D
A definite advantage of using water as a fire extinguishing agent is its characteristic of _____.
A. alternate expansion and contraction as water in a liquid state becomes a vapor
B. absorption of smoke and gases as water is converted from a liquid to a vapor
C. rapid contraction as water is converted from a liquid to a vapor
D. rapid expansion as water absorbs heat and changes to steam

193. 691 Ref: Firefighting, Extinguishing Agent, Water D
An extinguishing agent which effectively cools, dilutes combustible vapors, removes oxygen, and provides a heat and smoke screen is _____.
A. carbon dioxide
B. Halon 1301
C. dry chemical
D. water fog

194. 1708 Ref: Firefighting, Extinguishing Agent, Water B
On a class "B" fire, which portable fire extinguisher would be the LEAST desirable?
A. Carbon dioxide
B. Water (stored pressure)
C. Dry chemical
D. Foam

195. 2163 Ref: Firefighting, Extinguishing Agent, Water B
The best method of extinguishing a class A fire is to _____.
A. remove oxygen from the area
B. cool fuel below ignition temperature
C. smother with CO2
D. smother fire with foam

196. 2578 Ref: Firefighting, Extinguishing Agent, Water A
The extinguishing agent most effective for combating wood fires is _____.
A. water
B. carbon dioxide
C. foam
D. dry chemical

197. 2736 Ref: Firefighting, Extinguishing Agent, Water A
The main advantage of a steady stream of water on a class "A" fire is that it _____.
A. breaks up and cools the fire
B. protects the firefighting crew
C. removes the oxygen
D. washes the fire away

198. 2799 Ref: Firefighting, Extinguishing Agent, Water A
The most effective cooling agent among those normally used to fight fires is _____.
A. water fog or spray
B. chemical foam
C. mechanical foam
D. carbon dioxide

199. 2801 Ref: Firefighting, Extinguishing Agent, Water A
The most effective fire extinguishing agent to use on burning linen is _____.
A. water
B. carbon dioxide
C. dry chemical
D. foam

200. 2902 Ref: Firefighting, Extinguishing Agent, Water B
The primary method by which water spray puts out fires is by _____.
A. removing the oxygen
B. cooling the fire below the ignition temperature
C. removing combustible material
D. diluting combustible vapors

201. 3492 Ref: Firefighting, Extinguishing Agent, Water B
What are the most important reasons for using water fog to fight fires?
A. Smothers burning surfaces, organically destroys fuel
B. Cools fire and adjacent surfaces, provides protective barrier
C. Reaches areas not protected by steam or CO2 smothering systems
D. Allows fire to be attacked from leeward, saturates liquid surfaces

202. 3934 Ref: Firefighting, Extinguishing Agent, Water D
When choosing extinguishers to fight a Class "B" fire do NOT use _____.
A. carbon dioxide
B. dry chemical
C. foam (stored-pressure type)
D. water (cartridge-operated)

203. 3970 Ref: Firefighting, Extinguishing Agent, Water B
When fighting an oil or gasoline fire in the bilge, which of the following should NOT be used?
A. Foam
B. Solid stream water nozzle
C. All-purpose nozzle
D. Carbon dioxide

204. 4219 Ref: Firefighting, Extinguishing Agent, Water D
Which extinguishing agent is most effective on a mattress fire?
A. CO2
B. Foam
C. Dry Chemical
D. Water

205. 4224 Ref: Firefighting, Extinguishing Agent, Water C
Which extinguishing agent will absorb the most heat?
A. CO2
B. Foam
C. Water
D. Dry chemical

206. 4225 Ref: Firefighting, Extinguishing Agent, Water B
Which extinguishing agent will cool down a heated bulkhead in the least amount of time?
A. Water stream
B. Water fog or spray
C. Steam
D. Dry chemical

207. 4256 Ref: Firefighting, Extinguishing Agent, Water A
Which fire-fighting agent is most effective at removing heat?
A. Water spray
B. Foam
C. Carbon dioxide
D. Dry chemical

208. 3607 Ref: Firefighting, Extinguishing Agent, Water, D
What is the BEST conductor of electricity?
A. Carbon dioxide
B. Distilled water
C. Fresh water
D. Salt water

209. 3528 Ref: Firefighting, Fire pump C
What does the term "head" mean when applied to a fire pump?
A. Length of the discharge pipe
B. Height of the discharge pipe
C. Difference between the discharge and suction pressures
D. Sum of discharge and suction pressures

210. 5014 Ref: Firefighting, Fueling A
You should be most concerned about a possible explosion or fire in fuel tanks _____.
A. during fueling when the fuel first strikes the tank bottom
B. during fueling when the fuel strikes fuel already in the tank
C. when underway as the fuel is moved by wave action
D. shortly after fueling when fuel vapors gather

211. 102 Ref: Firefighting, Galley D
A fire in the galley ALWAYS poses the additional threat of _____.
A. contaminating food with extinguishing agent
B. spreading through the engineering space
C. causing loss of stability
D. a grease fire in the ventilation system

212. 131 Ref: Firefighting, Galley C
A galley grease fire on the stove may be extinguished using_____.
A. water
B. foam
C. the range hood extinguishing system
D. fire dampers

213. 169 Ref: Firefighting, Galley C
A large fire, involving class "A" material, has developed in the ship's galley. In combating this fire, you should _____.
A. keep the galley door closed until all the class "A" material has been consumed by the fire
B. have a hose team cool the galley door, then open the door and extinguish the fire using a type B-II extinguisher
C. cool adjoining horizontal and vertical surfaces before opening the galley door
D. advance the hose team into the galley without any preparatory action

214. 1026 Ref: Firefighting, Galley D
Fighting a fire in the galley poses the additional threat of _____.
A. contaminating food with extinguishing agent
B. spreading through the engineering space
C. loss of stability
D. a grease fire in the ventilation system

215. 4336 Ref: Firefighting, Galley B
Which of the following would be of immediate concern after discovering a large fire in the ship's galley?
A. An adjacent storeroom, containing spare parts
B. A storeroom directly above, containing combustible fluids
C. An adjacent storeroom, containing mattresses and linen
D. An adjacent storeroom, marked "Stewards Stores"

216. 2898 Ref: Firefighting, Helicopter A
The primary danger in helicopter fires is _____.
A. burning jet fuel running on to quarters or other areas
B. loss of stability
C. rotating and flying debris
D. heat damage to helicopter structure

217. 94 Ref: Firefighting, Hose D
A fire hose has a _____.
A. male coupling at both ends
B. female coupling at both ends
C. female coupling at the nozzle end and a male coupling at the hydrant end
D. male coupling at the nozzle end and a female coupling at the hydrant end

218. 380 Ref: Firefighting, Hose B
A spanner is a _____.
A. cross connection line between two main fire lines
B. special wrench for the couplings in a fire hose line
C. tackle rigged to support a fire hose
D. None of the above

219. 737 Ref: Firefighting, Hose A
Approximately how far could a straight stream of water reach if the fire hose pressure is reduced to 60 PSI?
A. 50 feet
B. 100 feet
C. 150 feet
D. 200 feet

220. 974 Ref: Firefighting, Hose B
Each fire hose coupling on a MODU must have threads that meet the specifications of the _____.
A. American Petroleum Institute
B. National Standard Fire hose Coupling
C. American Society of Mechanical Engineers
D. Underwriter's Laboratories, Inc.

221. 1038 Ref: Firefighting, Hose C
Fire hose should be washed with _____.
A. salt water and a wire brush
B. caustic soap
C. mild soap and fresh water
D. a holystone

222. 2184 Ref: Firefighting, Hose D
The canvas covering of fire hose is called the _____.
A. casing
B. outer hose
C. line cover
D. jacket

223. 2336 Ref: Firefighting, Hose B
The danger of a charged hose left unattended on deck with the nozzle open is _____.
A. the hose could burst
B. the nozzle end will whip about causing damage or injury
C. water damage to vessel's cargo or structure
D. personnel might trip over the hose

224. 3399 Ref: Firefighting, Hose B
Under normal firefighting conditions, approximately how far could a straight stream of water reach when the hose pressure is 100 PSI?
A. 50 feet
B. 100 feet
C. 150 feet
D. 200 feet

225. 3690 Ref: Firefighting, Hose B
What is the minimum number of people required to safely handle a 1-1/2 inch fire hose?
A. 1
B. 2
C. 3
D. 4

226. 3691 Ref: Firefighting, Hose C
What is the minimum number of people required to safely handle a 2-1/2 inch fire hose?
A. 1
B. 2
C. 3
D. 4

227. 3710 Ref: Firefighting, Hose D
What is the most vulnerable part of the fire main system?
A. The fire pump
B. Exposed hard piping
C. The hydrant valve
D. The fire hose

228. 4324 Ref: Firefighting, Hose C
Which of the following statements is FALSE concerning the proper procedure in handling a fire hose?
A. A 1½ inch hose should be deployed with a minimum of a nozzleman and hoseman.
B. Back-up hosemen should be placed wherever the hose makes a significant turn.
C. Use of a spanner wrench when attaching nozzles or additional lengths of hose is always critical.
D. The nozzleman should always hold the nozzle with one hand on top, to prevent kickback.

229. 4325 Ref: Firefighting, Hose D
Which of the following statements is FALSE concerning the proper procedure in handling a fire hose?
A. A 1½ inch hose should be deployed with a minimum of a nozzleman and hoseman.
B. The nozzleman should always hold the nozzle with one hand on top, to prevent kickback.
C. Back-up hosemen should be positioned wherever the hose makes a significant turn.
D. The fire hose should be partially charged before deploying it from the fire station.

230. 4405 Ref: Firefighting, Hose A
Which statement about stowing spare hose is TRUE?
A. Fold the hose so that the male coupling is about 4 feet from the female coupling, then roll it up.
B. Roll the hose starting at the female end.
C. Roll the hose starting at the male end.
D. Fold the hose into lengths about 6 feet long and then lash the folds together.

231. 4696 Ref: Firefighting, Hose B
Why is spare fire hose rolled for storage?
A. Water in the hose is forced out the end in the rolling process.
B. The threads on the male end are protected by the hose.
C. Rolling provides maximum protection against entry of foreign objects into the couplings.
D. Rolling provides maximum protection to the outer covering of the hose.

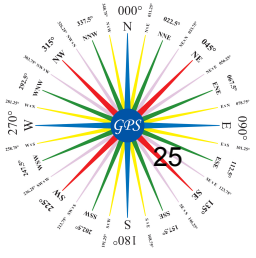
232. 88 Ref: Firefighting, Hose Coupling C
A double male coupling is one that _____.
A. has left hand twist
B. has inside threads on both ends
C. has outside threads on both ends
D. takes two men to operate

233. 1037 Ref: Firefighting, Hose Coupling A
Fire hose couplings _____.
A. are made of bronze, brass, or soft alloy metals
B. should be painted red in order to identify hose lengths
C. are specially hardened to prevent crushing
D. should be greased frequently

234. 3355 Ref: Firefighting, Hose Coupling D
To lubricate the swivel or remove corrosion from a fire hose coupling, you should use _____.
A. glycerine
B. graphite
C. kerosene
D. fresh water and soap

235. 3368 Ref: Firefighting, Hose Coupling C
To remedy a leaking fire hose connection at the hydrant, secure the valve and _____.
A. replace the gasket in the male coupling
B. reduce fire pump pressure
C. replace the gasket in the female coupling
D. rethread the male coupling

236. 3824 Ref: Firefighting, Hose Coupling D
What should be used to remove corrosion from the swivel on the female coupling of a fire hose?
A. Bearing grease and a wire brush
B. Talc and fine sandpaper
C. Fish oil and a soft brush
D. Fresh water, soap, and a stiff brush



237. 3998 Ref: Firefighting, Hose Coupling C
When joining the female coupling of the fire hose to the male outlet of the hydrant, you should make sure that the _____.
A. threads are lubricated
B. nozzle is attached to the hose
C. female coupling has a gasket
D. hose is led out

238. 3965 Ref: Firefighting, Hose Team C
When fighting a fire in an enclosed space, the hose team should crouch as low as possible to _____.
A. maneuver with the hose more easily
B. obtain the best available air for breathing
C. allow the heat and steam to pass overhead
D. None of the above

239. 4106 Ref: Firefighting, Hose Team C
When two fire hose teams are attacking a fire they should _____.
A. use different fire hose pressures
B. use fire hoses of different sizes
C. not attack the fire from opposite sides
D. not wear protective clothing

240. 1150 Ref: Firefighting, House Cleaning B
Good housekeeping on a vessel prevents fires by _____.
A. allowing better access in an emergency
B. eliminating potential fuel sources
C. eliminating trip hazards
D. improving personnel qualifications

241. 1948 Ref: Firefighting, House Cleaning B
Paints and solvents on a vessel should be _____.
A. stored safely at the work site until work is completed
B. returned to the paint locker after each use
C. covered at all times to protect from ignition sources
D. stored in a suitable gear locker

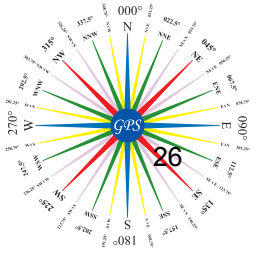
242. 3571 Ref: Firefighting, Ignition D
What is LEAST likely to cause ignition of fuel vapors?
A. Static electricity
B. An open running electric motor
C. Loose wiring
D. Explosion proof lights

243. 4308 Ref: Firefighting, Ignition D
Which may ignite fuel vapors?
A. Static electricity
B. An open and running motor
C. Loose wiring
D. All of the above

244. 57 Ref: Firefighting, Indicator, Gas D
A combustible gas indicator meter is calibrated to read the percentage of _____.
A. vapor to oxygen
B. the flammable limit concentration
C. the autoignition concentration
D. the lower explosive limit concentration

245. 58 Ref: Firefighting, Indicator, Gas A
A combustible gas indicator will operate correctly ONLY when the _____.
A. hydrocarbon content of the atmosphere is less than the U.E.L.
B. atmosphere is deficient in oxygen
C. compartment to be tested is free of CO2
D. All of the above

246. 270 Ref: Firefighting, Indicator, Gas D
A pumproom is suspected of accumulating gases after a ventilation machinery breakdown. Where should the combustible gas indicator case be placed when testing the pumproom atmosphere for combustible gases?
A. In the lower level of the pumproom
B. In the middle level of the pumproom
C. In the upper level of the pumproom
D. On the deck outside the pumproom



247. 882 Ref: Firefighting, Indicator, Gas C
Combustible gas indicators measure the presence of combustible gas as a percentage of the _____.
A. flash point
B. upper explosive limit
C. lower explosive limit
D. fire point

248. 883 Ref: Firefighting, Indicator, Gas A
Combustible gas indicators operate by drawing an air sample into the instrument _____.
A. over an electrically heated platinum filament
B. where it is mixed with nitrogen
C. where it is ignited by a sparking device
D. where its specific gravity is measured

249. 2597 Ref: Firefighting, Indicator, Gas B
The flammable limits of gasoline are 1.3 to 7.6 percent volume of air. You are testing a tank that contained gasoline by using a combustible gas indicator. Under testing, the tank sample caused the needle to move rapidly to 100 on the dial and remain there. What is the concentration of flammable gas?
A. 0
B. 1.3 to 7.6%
C. over 7.6%
D. over 100%

250. 2598 Ref: Firefighting, Indicator, Gas A
The flammable limits of gasoline are 1.3 to 7.6 percent volume of the air. You are testing a tank that contained gasoline by using a combustible gas indicator. Under testing, the tank sample registered 55 on the instrument's dial. What is the concentration of flammable gases?
A. 0.007
B. 0.041
C. 0.055
D. 0.55

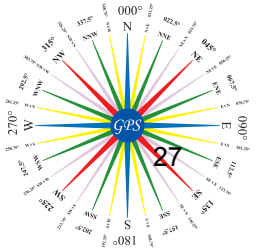
251. 4117 Ref: Firefighting, Indicator, Gas B
When using the combustible gas indicator, a special filter for filtering the incoming sample must be used if the atmosphere being tested contains vapors of _____.
A. sour crude
B. leaded gasoline
C. CO2
D. chlorine

252. 4274 Ref: Firefighting, Indicator, Gas B
Which instrument is suitable for determining the presence of explosive concentrations of fuel oil vapors in tanks?
A. A flame safety lamp
B. A combustible gas indicator
C. A liquid cargo meter
D. All of the above

253. 4442 Ref: Firefighting, Indicator, Gas A
Which statement is TRUE concerning a combustible gas indicator?
A. Several seconds will elapse between the taking of a sample and the reading appearing on the dial.
B. The instrument will operate in any atmosphere.
C. Toxicity of the atmosphere is measured by the instrument.
D. All of the above

254. 4452 Ref: Firefighting, Indicator, Gas B
Which statement is TRUE concerning combustible gas indicators?
A. One sample of air is adequate to test a tank.
B. They do not work properly where there is a lack of oxygen.
C. They will detect a lack of oxygen.
D. They are calibrated to read the percentage chance of explosion.

255. 4668 Ref: Firefighting, Indicator, Gas D
While using a combustible gas indicator, if the hydrocarbon content of the atmosphere exceeds the U.E.L., the needle of the indicator will _____.
A. remain at zero without moving
B. move to the maximum reading and stay there
C. move halfway up the scale
D. move to the maximum reading and immediately return to zero



256. 4903 Ref: Firefighting, Indicator, Gas C
You are testing a tank that contained gasoline by using a combustible gas indicator. Under testing, the tank sample caused the needle to move rapidly to 100 on the dial then fall to zero. What is the concentration of flammable gas?
A. Less than the flammable range
B. Within the flammable range
C. Over the flammable range
D. The explosimeter is defective and giving a false reading.

257. 597 Ref: Firefighting, Indicator, Oxygen B
After each reading of an oxygen indicator, the instrument should be purged with _____.
A. CO2
B. fresh air
C. the tested compartment's air
D. water

258. 721 Ref: Firefighting, Indicator, Oxygen A
An oxygen indicator can be used to determine if there is _____.
A. sufficient oxygen in a compartment to support life
B. combustible gases present
C. hydrogen gas present
D. All of the above

259. 907 Ref: Firefighting, Indicator, Oxygen D
Deficient oxygen content inside a chain locker can be detected with _____.
A. litmus paper
B. a combustible gas indicator
C. an oxygen breathing apparatus
D. an oxygen indicator

260. 908 Ref: Firefighting, Indicator, Oxygen D
Deficient oxygen content inside a chain locker can be detected with _____.
A. litmus paper
B. combustible gas indicator
C. oxygen breathing apparatus
D. oxygen indicator

261. 1336 Ref: Firefighting, Indicator, Oxygen A
If the meter needle of the oxygen indicator cannot be set to zero, what should be done?
A. Replace the batteries.
B. Check the sampling tube for blockage.
C. Adjust the final reading by the amount the needle is displaced from zero.
D. Replace the platinum filament.

262. 2866 Ref: Firefighting, Indicator, Oxygen A
The oxygen indicator is an instrument that measures the _____.
A. amount of oxygen in the atmosphere of a confined space
B. amount of combustible gas as a percentage of the lower explosive limit in a confined space
C. concentration of CO2 as a percentage of oxygen in a confined space
D. None of the above

263. 3504 Ref: Firefighting, Indicator, Oxygen C
What can be used to measure the percentage of oxygen inside a chain locker?
A. Flame safety lamp
B. Combustible gas indicator
C. Oxygen indicator
D. H2S meter

264. 3513 Ref: Firefighting, Indicator, Oxygen B
What could result in an incorrect oxygen concentration reading on the oxygen indicator?
A. Exposure to carbon dioxide for no more than 1 minute
B. Exposure to carbon dioxide for more than 10 minutes
C. Exposure to a very low concentration of sulfur dioxide for no more than 2 minutes
D. None of the above

265. 4120 Ref: Firefighting, Indicator, Oxygen B
When using the oxygen indicator, which reaction from the needle should you expect as a sample is drawn into the instrument?
A. Rise to the correct reading and then, slowly fall to zero as the oxygen in the sample is consumed
B. Move back and forth and finally stabilize at the correct reading after about 10 seconds
C. Rise to the correct reading immediately and then rise slowly to a false reading as the operating temperature increases
D. Slowly rise to the correct reading and then remain stationary

266. 4472 Ref: Firefighting, Indicator, Oxygen C
Which statement is TRUE concerning the oxygen indicator?
A. Exposure to flue gas has no effect on the instrument.
B. Only one level of the tested space need be sampled by the instrument.
C. Prolonged exposure to CO2 can result in false readings.
D. The instrument can detect hydrogen gas.

267. 4647 Ref: Firefighting, Indicator, Oxygen B
While testing a cargo tank, your oxygen indicator reads 25% oxygen in the tank. You would then _____.
A. enter the tank safely
B. suspect the accuracy of the reading
C. ventilate the tank
D. test for nitrogen

268. 4922 Ref: Firefighting, Indicator, Oxygen C
You are using an oxygen indicator. How long should you wait after the sample is drawn into the instrument before reading the meter?
A. No wait is necessary, the reading occurs immediately.
B. At least 5 seconds
C. At least 10 seconds
D. At least 20 seconds

269. 2676 Ref: Firefighting, International Shore Connection A
The international shore connection _____.
A. allows hook up of fire fighting water from shore facilities
B. satisfies pollution prevention requirements
C. allows emergency use of the fire main for deballasting
D. permits discharge of waste oil to shore facilities

270. 2810 Ref: Firefighting, Liquid cargo D
The most likely location for a liquid cargo fire to occur on a tanker would be _____.
A. in the midships house
B. at the main deck manifold
C. at the vent header
D. in the pumproom

271. 2901 Ref: Firefighting, LPG D
The primary hazard of liquefied petroleum gas and liquefied natural gas is _____.
A. pressure
B. toxicity
C. temperature
D. flammability

272. 310 Ref: Firefighting, SCBA C
A self-contained breathing apparatus is used to _____.
A. make underwater repairs to barges
B. determine if the air in a tank is safe for men
C. enter areas that may contain dangerous fumes or lack oxygen
D. resuscitate an unconscious person

273. 608 Ref: Firefighting, SCBA C
After putting on a self-contained breathing apparatus, you open the air supply and hear a continuous ringing of a bell. What does this mean?
A. The unit is working properly.
B. The face mask is not sealed properly.
C. The air bottle needs to be refilled.
D. The air supply hose has a leak.

274. 2179 Ref: Firefighting, SCBA C
The bypass valve on a self-contained breathing device should be opened if _____.
A. you are entering a space containing poisonous vapors
B. you are entering a space containing explosive gases
C. the regulator of the breathing apparatus malfunctions
D. the facepiece of the breathing device is too tight

275. 2618 Ref: Firefighting, SCBA B
The function of the bypass valve on the self-contained breathing apparatus is to _____.
A. control the pressure of the oxygen as it enters the body
B. allow the wearer to manually give himself oxygen
C. release excess heat which would otherwise cause the bottle to explode
D. allow exhaled gases to pass outside the bottle

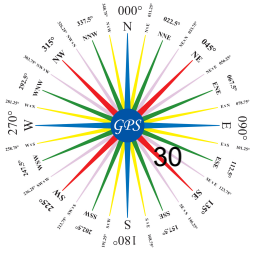
276. 2930 Ref: Firefighting, SCBA C
The rated operating time of a self-contained breathing device may be reduced in actual use because of _____.
A. pressure differences in pressure differences in the atmosphere
B. the length of the hose attached to the facepiece
C. the physical exertion of the person wearing the device
D. spaces containing poisonous vapors

277. 2987 Ref: Firefighting, SCBA D
The self-contained breathing device should not be used in which situation?
A. Oxygen deficient spaces
B. Compartments containing poisonous vapors
C. Fighting fires that produce heavy smoke
D. Underwater search

278. 3369 Ref: Firefighting, SCBA D
To safely enter a compartment where CO2 has been released from a fixed extinguishing system, you should _____.
A. wear a canister type gas mask
B. test the air with an Orsat apparatus
C. test the air with a pure air indicator
D. wear a self-contained breathing apparatus

279. 3641 Ref: Firefighting, SCBA B
What is the function of the bypass valve on the self-contained breathing apparatus?
A. The valve opens in excessive heat to release the oxygen in the bottle and prevent the bottle from exploding.
B. In the event of a malfunction in the equipment, the valve can be operated manually to give the wearer air.
C. When pressure in the apparatus exceeds 7 psi above atmospheric pressure, the valve opens to release pressure.
D. The valve reduces the high pressure in the bottle to about 3 psi above atmospheric pressure.

280. 4065 Ref: Firefighting, SCBA A
When the alarm bell sounds on a positive-pressure, self-contained breathing apparatus, how long will reserve air supply last?
A. About 4-5 minutes
B. About 8-10 minutes
C. About 12-15 minutes
D. About 18-20 minutes



281. 4066 Ref: Firefighting, SCBA B
When the bypass valve of a self-contained breathing apparatus is opened, the mainline valve should be _____.
A. completely open
B. completely closed
C. pinched to check the air flow
D. immediately disconnected

282. 4067 Ref: Firefighting, SCBA A
When the bypass valve of a self-contained breathing device is opened, the air flows _____.
A. directly to the facepiece
B. directly to the air supply bottle
C. through the regulator
D. from the bottle into the atmosphere

283. 4090 Ref: Firefighting, SCBA B
When the mainline valve of a self-contained breathing apparatus is open, the bypass valve should be _____.
A. completely open
B. completely closed
C. disconnected
D. partially opened

284. 4770 Ref: Firefighting, SCBA, OATH C
You are in a tank wearing a breathing apparatus and you desire to return topside. How many tugs of the lifeline mean "Take up slack"?
A. 1
B. 2
C. 3
D. 4

285. 4771 Ref: Firefighting, SCBA, OATH C
You are in a tank wearing the self-contained breathing apparatus and you desire to return topside. How many tugs of the lifeline mean to take up the slack?
A. One
B. Two
C. Three
D. Four

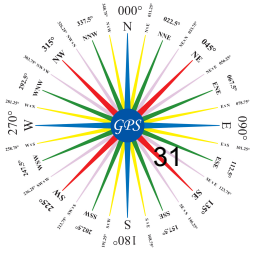
286. 4899 Ref: Firefighting, SCBA, OATH B
You are tending the lifeline of a man who entered a compartment using a breathing apparatus. How many tugs on the lifeline indicate the man should advance?
A. 1
B. 2
C. 3
D. 4

287. 4900 Ref: Firefighting, SCBA, OATH C
You are tending the lifeline of a man who entered a compartment using a breathing apparatus. How many tugs on the lifeline indicate the man should back out?
A. 1
B. 2
C. 3
D. 4

288. 4901 Ref: Firefighting, SCBA, OATH D
You are tending the lifeline of a man who entered a tank using a breathing apparatus. How many tugs on the lifeline indicate that the man should come out immediately?
A. 1
B. 2
C. 3
D. 4

289. 4902 Ref: Firefighting, SCBA, OATH A
You are tending the lifeline of a person who has entered a compartment wearing a breathing apparatus. How many tugs of the lifeline mean "Are you all right"?
A. One
B. Two
C. Three
D. Four

290. 4924 Ref: Firefighting, SCBA, OATH A
You are wearing a breathing apparatus inside a tank. How many tugs on the lifeline indicate that you are all right?
A. 1
B. 2
C. 3
D. 4



291. 4925 Ref: Firefighting, SCBA, OATH B
You are wearing a breathing apparatus inside a tank. How many tugs on the lifeline should you give to indicate that you are advancing?
A. 1
B. 2
C. 3
D. 4

292. 4926 Ref: Firefighting, SCBA, OATH D
You are wearing a breathing apparatus inside a tank. How many tugs on the lifeline should you give to indicate that you need help?
A. 1
B. 2
C. 3
D. 4

293. 571 Ref: Firefighting, Shut Off Valves, Fusible links B
According to the regulations, what fire safety control feature is required in quick-closing shut off valves?
A. Electrical cut off switch
B. A fusible link
C. Manual cut off switch
D. A water spray actuator

294. 56 Ref: Firefighting, Spray D
A combination or all-purpose nozzle produces _____.
A. low-velocity fog only
B. a solid stream only
C. a solid stream and foam
D. a solid stream and fog

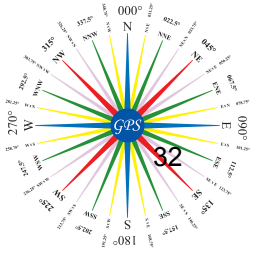
295. 138 Ref: Firefighting, Spray B
A high-velocity fog stream can be used in fire fighting situations to drive heat and smoke ahead of the fire fighters in a passageway. This technique should only be used when _____.
A. using a 2-1/2 inch hose
B. there is an outlet for the smoke and heat
C. the fire is totally contained by the ship's structure
D. at least two fog streams can be used

296. 1165 Ref: Firefighting, Spray D
High-velocity fog _____.
A. is a finer, more diffuse water spray than low-velocity fog
B. requires that the water pressure be no greater than 60 psi
C. produces an effective fog pattern no more than 6 feet beyond the nozzle
D. extinguishes a fire by absorbing heat and reducing the supply of oxygen

297. 1274 Ref: Firefighting, Spray C
If a firefighting situation calls for low-velocity fog you would _____.
A. order the engine room to reduce pressure on the fire pump
B. put the lever on an all-purpose fire nozzle all the way forward
C. attach a low-velocity fog applicator with the nozzle shut down
D. put the lever on an all-purpose fire nozzle all the way back

298. 1881 Ref: Firefighting, Spray A
On the all-purpose nozzle, the position of the valve when the handle is all the way forward is _____.
A. shut
B. fog
C. solid stream
D. spray

299. 1926 Ref: Firefighting, Spray B
One advantage of the "all-purpose nozzle" is that it _____.
A. can fit any size hose
B. converts a stream of water into a fog
C. increases the amount of water reaching the fire
D. can spray two streams of water at the same time



300. 2130 Ref: Firefighting, Spray C
The 12-foot low-velocity fog applicator _____.
A. has a spray pattern 12 feet in diameter
B. can be used in conjunction with both 11/2 inch and 2-1/2 inch all-purpose nozzles
C. has a 90° bend at its discharge end
D. has a screw thread end which connects to the all-purpose nozzle

301. 2140 Ref: Firefighting, Spray B
The all-purpose nozzle will produce a fog spray when you _____.
A. pull the nozzle handle all the way back toward the operator
B. pull the nozzle handle back to a position where the handle is perpendicular to the plane of the nozzle
C. push the nozzle handle forward as far as it will go
D. insert a fog applicator between the fire hose and nozzle

302. 2538 Ref: Firefighting, Spray B
The difference in water spray pattern between the high-velocity tip and low-velocity applicator used with the all-purpose nozzle is due to _____.
A. a difference in water pressure
B. the method of breaking up the water stream
C. the length of the applicator
D. All of the above

303. 2643 Ref: Firefighting, Spray A
The high-velocity fog tip used with the all-purpose fire fighting nozzle should always be _____.
A. attached by a chain
B. coated with heavy grease to prevent corrosion
C. painted red for identity as emergency equipment
D. stored in the clip at each fire station

304. 3028 Ref: Firefighting, Spray B
The spray of water in low-velocity fog will have _____.
A. greater range than high-velocity fog
B. lesser range than high-velocity fog
C. about the same range as high-velocity fog
D. greater range than a solid stream

305. 3029 Ref: Firefighting, Spray A
The spray of water produced by using the high-velocity fog position on an all-purpose nozzle will have _____.
A. greater range than low-velocity fog
B. lesser range than low-velocity fog
C. about the same range as low-velocity fog
D. greater range than a solid stream

306. 3244 Ref: Firefighting, Spray B
The straight stream capability of an all-purpose nozzle is used in fighting a class A fire to _____.
A. shield fire fighters from radiant heat
B. break up burning material
C. get the most water possible on the fire
D. drive heat and smoke ahead of the fire fighters

307. 3347 Ref: Firefighting, Spray B
To get low-velocity fog from an all-purpose nozzle, you would _____.
A. attach the bronze nozzle tip to the fog outlet of the nozzle
B. attach an applicator to the nozzle in place of the bronze nozzle tip
C. attach an applicator to the solid stream outlet on the nozzle
D. simply move the handle to the vertical position on the nozzle

308. 3471 Ref: Firefighting, Spray C
Water fog from an all-purpose nozzle may be used to _____.
A. fight an electrical fire
B. fight a magnesium fire
C. eliminate smoke from a compartment
D. All of the above

309. 3562 Ref: Firefighting, Spray D
What is an advantage of water fog or water spray over a straight stream of water in fighting an oil fire?
A. It has a smothering effect on the fire.
B. It requires less water to remove the same amount of heat.
C. It gives more protection to fire fighting personnel.
D. All of the above

310. 3921 Ref: Firefighting, Spray C
When approaching a fire from leeward you should shield fire fighters from the fire by using _____.
A. a straight stream of water
B. foam spray
C. high-velocity fog
D. low-velocity fog

311. 3922 Ref: Firefighting, Spray A
When approaching a fire from windward, you should shield firefighters from the fire by using _____.
A. low-velocity fog
B. high-velocity fog
C. a straight stream of water
D. foam spray

312. 3925 Ref: Firefighting, Spray C
When attempting to enter a compartment containing a fire, which method of applying water is best?
A. High-velocity fog stream directed toward the overhead
B. Straight stream directed into the center of the fire
C. Sweeping the compartment with a fog stream
D. Solid stream directed toward the overhead

313. 4075 Ref: Firefighting, Spray D
When the handle of an all-purpose nozzle is in the forward position, the nozzle will _____.
A. produce high-velocity fog
B. produce low-velocity fog
C. produce a straight stream
D. shut off the water

314. 4076 Ref: Firefighting, Spray A
When the handle of an all-purpose nozzle is in the vertical position and without an applicator, the all-purpose nozzle will _____.
A. produce high-velocity fog
B. produce low-velocity fog
C. produce a straight stream
D. shut off the water

315. 4077 Ref: Firefighting, Spray C
When the handle of an all-purpose nozzle is pulled all the way back, it will _____.
A. produce high-velocity fog
B. produce low-velocity fog
C. produce a straight stream
D. shut off the water

316. 4114 Ref: Firefighting, Spray B
When using a high-velocity fog stream in a passageway, the possibility of a blow back must be guarded against. Blow back is most likely to occur when _____.
A. pressure builds up in the nozzle which causes a surge of water
B. the only opening in a passageway is the one from which the nozzle is being advanced
C. pressure in the fire hose drops below 100 psi
D. a bulkhead collapses due to heat and pressure

317. 4705 Ref: Firefighting, Spray A
With an approved combination nozzle, low-velocity fog is produced by _____.
A. inserting an applicator in the nozzle
B. putting the handle of the nozzle in the forward position
C. directing a straight stream of water against the ship's structure
D. the combination nozzle only when the water pressure exceeds 125 psi

318. 4844 Ref: Firefighting, Spray B
You are operating a fire hose with an applicator attached. If you put the handle of the nozzle in the vertical position you will _____.
A. produce high-velocity fog
B. produce low-velocity fog
C. produce a straight stream
D. shut off the water

319. 1041 Ref: Firefighting, Spread D
Fire may be spread by which means?
A. Conduction of heat to adjacent surfaces
B. Direct radiation
C. Convection
D. All of the above

320. 3030 Ref: Firefighting, Spread D
The spread of fire is NOT prevented by _____.
A. shutting off the oxygen supply
B. cooling surfaces adjacent to the fire
C. removing combustibles from the endangered area
D. removing smoke and toxic gases by ensuring adequate ventilation

321. 3363 Ref: Firefighting, Spread, Conduction A
To prevent the spread of fire by conduction you should _____.
A. cool the bulkheads around the fire
B. remove combustibles from direct exposure
C. close all openings to the area
D. shut off all electric power

322. 3364 Ref: Firefighting, Spread, Conduction C
To prevent the spread of fire by convection you should _____.
A. cool the bulkhead around the fire
B. remove combustibles from direct exposure
C. close all openings to the area
D. shut off all electrical power

323. 816 Ref: Firefighting, Spread, Convection D
Blocking open or removing fire dampers can cause _____.
A. fixed foam systems to be ineffective
B. faster cooling of the fire
C. the accumulation of explosive gases
D. the fire to spread through the ventilation system

324. 897 Ref: Firefighting, Spread, Convection C
Convection spreads a fire by _____.
A. transmitting the heat of a fire through the ship's metal
B. burning liquids flowing into another space
C. heated gases flowing through ventilation systems
D. the transfer of heat across an unobstructed space

325. 1032 Ref: Firefighting, Spread, Convection A
Fire dampers prevent the spread of fire by _____.
A. convection
B. conduction
C. radiation
D. direct contact

326. 1541 Ref: Firefighting, Spread, Convection C
In the event of a fire, the doors to a stair tower must be closed to prevent the spread of fire by _____.
A. ventilation
B. radiation
C. convection
D. conduction

327. 1993 Ref: Firefighting, Spread, Radiation A
Radiation spreads a fire by _____.
A. transferring heat across an unobstructed space
B. heated gases flowing through ventilation systems
C. burning liquids flowing into another space
D. transmitting the heat of a fire through the ship's metal

328. 2900 Ref: Firefighting, Sprinkler B
The primary function(s) of an automatic sprinkler system is(are) to _____.
A. extinguish the fire which triggers it
B. limit the spread of fire and control the amount of heat produced
C. protect people in the areas which have sprinkler heads
D. alert the crew to the fire

329. 1355 Ref: Firefighting, Stability B
If you are fighting a fire below the main deck of your vessel, which action is most important concerning the stability of the vessel?
A. Shutting off electricity to damaged cables
B. Pumping fire-fighting water overboard
C. Maneuvering the vessel so the fire is on the lee side
D. Removing burned debris from the cargo hold

330. 4755 Ref: Firefighting, Stability B
You are fighting a fire in a cargo hold on your vessel. Which action is most important concerning the stability of the vessel?
A. Shutting off electricity to damaged cables
B. Draining fire-fighting water and pumping it overboard
C. Maneuvering the vessel so the fire is on the lee side
D. Removing burned debris from the cargo hold

331. 4757 Ref: Firefighting, Stability C
You are fighting a fire in a watertight compartment using hoses and salt water. Stability may be reduced because of _____.
A. progressive downflooding
B. reduction of water in the storage tanks
C. increase in free surface which reduces the metacentric height
D. reduction of KG to the minimum allowable

332. 1511 Ref: Firefighting, Steam D
In setting the valves on a steam-smothering system on a tank vessel, the master control valve to cargo tanks should be _____.
A. open and individual tank valves open
B. open and the individual tank valves closed
C. closed and the individual tank valves closed
D. closed and the individual tank valves open

333. 778 Ref: Firefighting, Ventilation, Fusible links D
Automatic fire dampers in ventilation systems are operated by use of _____.
A. heat or smoke detectors
B. C02 system pressure switches
C. remotely operated valves
D. fusible links

334. 1131 Ref: Firefighting, Ventilation, Fusible links B
Fusible-link fire dampers are operated by _____.
A. a mechanical arm outside the vent duct
B. the heat of a fire melting the link
C. electrical controls on the bridge
D. a break-glass and pull-cable system

335. 1132 Ref: Firefighting, Ventilation, Fusible links D
Fusible-link fire dampers are operated by _____.
A. a break-glass and pull-cable system
B. electrical controls on the bridge
C. a mechanical arm outside the vent duct
D. the heat of a fire melting the link

336. 3296 Ref: Firefighting, Ventilation, Fusible links C
The ventilation system of your ship has fire dampers restrained by fusible links. Which statement is TRUE?
A. A fusible link will automatically open after a fire is extinguished and reset the damper.
B. Fusible links must be replaced at every inspection for inspection for certification.
C. Fusible links must be replaced if a damper is activated.
D. Fusible links are tested by applying a source of heat to them.

337. 107 Ref: Firefighting, Vents B
A fire must be ventilated _____.
A. when using an indirect attack on the fire such as flooding with water
B. to prevent the gases of combustion from surrounding the firefighters
C. to minimize heat buildup in adjacent compartments
D. if compressed gas cylinders are stowed in the compartment on fire

338. 599 Ref: Firefighting, Vents B
After extinguishing a paint locker fire using the fixed CO2 system, the next action is to have the space _____.
A. opened and burned material removed
B. left closed with vents off until all boundaries are cool
C. checked for oxygen content
D. doused with water to prevent reflash

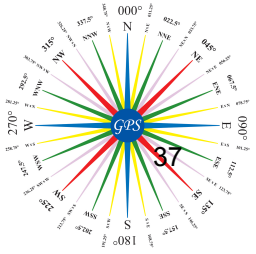
339. 779 Ref: Firefighting, Vents C
Automatic fire dampers in ventilation systems are operated by use of a _____.
A. remote operated valve
B. C02 system pressure switch
C. fusible link
D. heat or smoke detector

340. 1306 Ref: Firefighting, Vents D
If heavy smoke is coming from the paint locker, the FIRST firefighting response should be to _____.
A. release the CO2 flooding system
B. open the door to evaluate the extent of the fire
C. enter and use a portable extinguisher
D. secure the ventilation

341. 1606 Ref: Firefighting, Vents C
It is necessary to secure the forced ventilation to a compartment where there is a fire to _____.
A. allow the exhaust fans to remove smoke
B. extinguish the fire by carbon monoxide smothering
C. prevent additional oxygen from reaching the fire
D. protect fire fighting personnel from smoke

342. 2649 Ref: Firefighting, Vents A
The hoods over galley ranges present what major hazard?
A. Grease collects in the duct and filter and if it catches fire is difficult to extinguish.
B. In order to effectively draw off cooking heat they present a head-injury hazard to a person of average or more height.
C. They inhibit the effective operation of fire fighting systems in combating deep fat fryer or range fires.
D. They concentrate the heat of cooking and may raise surrounding flammable material to the ignition point.

343. 3297 Ref: Firefighting, Vents D
The ventilation system of your ship has fire dampers restrained by fusible links. Which statement is TRUE?
A. A fusible link will automatically open after a fire is extinguished and reset the damper.
B. Fusible links must be replaced at every inspection for certification.
C. Fusible links are tested by applying a source of heat to them.
D. Fusible links must be replaced if a damper is activated.



344. 3321 Ref: Firefighting, Vents C
There is a fire in the crew's quarters of your vessel. You should _____.
A. ventilate the quarters as much as possible
B. prepare to abandon ship
C. close all ventilation to the quarters if possible
D. attempt to put the fire out yourself before sounding the alarm

345. 3458 Ref: Firefighting, Vents A
Ventilation systems connected to a compartment in which a fire is burning are normally closed to prevent the rapid spread of the fire by _____.
A. convection
B. conduction
C. radiation
D. spontaneous combustion

346. 3976 Ref: Firefighting, Vents A
When flammable liquids are handled in a compartment on a vessel, the ventilation for that area should be _____.
A. operated continuously while vapors may be present
B. operated intermittently to remove vapors
C. available on standby for immediate use
D. shut down if an explosive mixture is present

347. 4049 Ref: Firefighting, Vents A
When should a fire be ventilated?
A. When attacking the fire directly
B. When using a steam smothering system
C. When using the fixed CO2 system
D. All of the above

348. 93 Ref: Firefighting, Wind B
A fire has broken out on the stern of your vessel. You should maneuver your vessel so the wind _____.
A. blows the fire back toward the vessel
B. comes over the bow
C. comes over the stern
D. comes over either beam

349. 105 Ref: Firefighting, Wind B
A fire is discovered in the forepeak of a vessel at sea. The wind is from ahead at 35 knots. You should _____.
A. remain on course and hold speed
B. change course and put the stern to the wind
C. change course to put the wind on either beam and increase speed
D. remain on course but slack the speed

350. 3320 Ref: Firefighting, Wind B
There is a fire aft aboard your vessel. To help fight the fire, you should _____.
A. put the wind off either beam
B. head the bow into the wind and decrease speed
C. put the stern into the wind and increase speed
D. put the stern into the wind and decrease speed

351. 4920 Ref: Firefighting, Wind A
You are underway when a fire breaks out in the forward part of your vessel. If possible, you should _____.
A. put the vessel's stern into the wind
B. abandon ship to windward
C. call for assistance
D. keep going at half speed