

Registration form

Fire Prevention CEU Course \$75.00
48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL \$40.00

Start and Finish Dates: _____ *You will have 90 days from this date
in order to complete this course*

Name _____ Signature _____
(This will appear on your certificate as above)

Address: _____

City _____ State _____ Zip _____ Email _____

Phone:
Home () _____ Work () _____ Fax () _____

Operator ID# _____ Expiration _____

Please circle which certification you are applying the course CEU's.

Water Treatment Water Distribution Wastewater Collection Pretreatment

Wastewater Treatment Groundwater Plumber Well Driller Pump Installer

Other _____

Your certificate will be mailed to you in about two weeks.

Technical Learning College
Western Campus
PO Box 420, Payson AZ 85547-0420
(928) 468-0665 Fax (928) 272-0747
Toll Free (866) 557-1746
info@tlch2o.com

3 digit code on back of card _____

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Referral's Name _____

Fire Prevention Answer Key

When completed, please fax to (928) 272-0747

Name

Address:

Date

- | | | | |
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| 6. T F | 48. T F | 90. T F | 132. T F |
| 7. T F | 49. T F | 91. T F | 133. T F |
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| 32. T F | 74. T F | 116. T F | 158. T F |
| 33. T F | 75. T F | 117. T F | 159. T F |
| 34. T F | 76. T F | 118. T F | 160. T F |
| 35. T F | 77. T F | 119. T F | 161. T F |
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| 38. T F | 80. T F | 122. T F | 164. T F |
| 39. T F | 81. T F | 123. T F | 165. T F |
| 40. T F | 82. T F | 124. T F | |
| 41. T F | 83. T F | 125. T F | |
| 42. T F | 84. T F | 126. T F | |

Please mail or fax this survey with your final exam

FIRE PREVENTION CEU COURSE CUSTOMER SERVICE RESPONSE CARD

DATE: _____

NAME: _____

ADDRESS: _____

E-MAIL _____ PHONE _____

PLEASE COMPLETE THIS FORM BY CIRCLING THE NUMBER OF THE APPROPRIATE ANSWER IN THE AREA BELOW.

1. Please rate the difficulty of your course.
Very Easy 0 1 2 3 4 5 Very Difficult
2. Please rate the difficulty of the testing process.
Very Easy 0 1 2 3 4 5 Very Difficult
3. Please rate the subject matter on the exam to your actual field or work.
Very Similar 0 1 2 3 4 5 Very Different
4. How did you hear about this Course? _____

What would you do to improve the course?

Any other concerns or comments.

Fire Prevention CEU Course Assignment

Your questions will come from the text of this course. The following questions will be True or False answers. You can e-mail the answers and registration form to TLC or fax the answers to us. If you need any assistance, utilize the Search function in Adobe Acrobat.

This assignment can also be applied toward your Industrial Hygienist's or HAZWOPER Certificate.

1. Flammable liquids sometimes may be substituted by relatively safe materials in order to reduce the risk of fires. Any substituted material should be stable and nontoxic and should either be flammable or have a low flashpoint.
A. True
B. False
2. Flammable and combustible liquids require careful handling at all times. The proper storage of flammable liquids within a work area is very important in order to protect personnel from fire and other safety and health hazards.
A. True
B. False
3. Not more than 120 gallons of Class I, Class II, and Class IIIA liquids may be stored in a storage cabinet. Of this total, not more than 60 gallons may be Class I and II liquids. Not more than three such cabinets (120 gallons each) may be located in a single fire area except in an industrial area.
A. True
B. False
4. Where approved storage cabinets or rooms are provided, inside storage will comply with all OSHA Rules as long as the Flashpoint is under 100.
A. True
B. False
5. The storage of any flammable or combustible liquid shall not physically obstruct a means of egress from the building or area unless employees are first notified.
A. True
B. False
6. Containers of flammable or combustible liquids will remain tightly sealed except when transferred, poured or applied. Remove only that portion of liquid in the storage container required to accomplish a particular job.
A. True
B. False
7. If a flammable and combustible liquid storage building is used, it will be a one-story building devoted principally to the handling and storing of flammable or combustible liquids.
A. True
B. False

Always call us after faxing the paperwork to ensure that we've received it.

8. The building will have 1-hour fire-rated exterior walls having no opening within 1 foot of such storage.
- A. True
 - B. False
9. Flammable paints, oils, and varnishes in 1 or 5 gallon containers, used for building maintenance purposes, may be stored temporarily in closed containers outside approved storage cabinets or room if kept at the job site for less than 10 calendar days.
- A. True
 - B. False
10. Every inside storage room will be provided with a continuous mechanical exhaust ventilation system.
- A. True
 - B. False
11. To prevent the accumulation of vapors, the location of both the makeup and exhaust air openings will be arranged to provide, as far as practical, air movement directly to the exterior of the building and if ducts are used, they will not be used for any other purpose.
- A. True
 - B. False
12. All ignition sources must not be eliminated where flammable liquids are used or stored.
- A. True
 - B. False
13. Open flames, such as cutting and welding torches, furnaces, matches, and heaters-these sources may be used around flammable liquids operations if the containers are properly grounded.
- A. True
 - B. False
14. Cutting or welding on flammable liquids equipment should not be performed unless the equipment has been properly emptied and purged with a neutral gas such as LPG.
- A. True
 - B. False
15. Chemical sources of ignition such as d.c. motors, switched, and circuit breakers-these sources should be eliminated where flammable liquids are handled or stored. Only approved explosion-proof devices should be used in these areas.
- A. True
 - B. False

16. Mechanical sparks-these sparks can be produced as a result of friction. Only nonsparking tools should be used in areas where flammable liquids are stored or handled.
- A. True
 - B. False
17. Static sparks-these sparks can be generated as a result of electron transfer between two contacting surfaces. The electrons can discharge in a small volume, raising the temperature to above the ignition temperature.
- A. True
 - B. False
18. Every effort should be made to eliminate the possibility of static sparks. Also proper bonding and grounding procedures must be followed when flammable liquids are transferred or transported.
- A. True
 - B. False
19. Materials that can contribute to a flammable liquid fire should not be stored with flammable liquids. Examples are caustics and organic peroxides, which, on decomposition, can generate large amounts of Nitrogen.
- A. True
 - B. False
20. Generally, flammable gases pose the same type of fire hazards as flammable liquids and their vapors. Many of the safeguards for flammable liquids also apply to flammable gases, other properties such as toxicity, reactivity, and corrosivity also must be taken into account.
- A. True
 - B. False
21. Also, a gas that is flammable could produce toxic combustion products.
- A. True
 - B. False
22. A portable fire extinguisher is a "**first aid**" device and is very effective when used while the fire is small. The use of fire extinguisher that matches the class of fire, by a person who is well trained, can save both lives and property.
- A. True
 - B. False
23. Portable fire extinguishers must be installed in workplaces regardless of other firefighting measures. The successful performance of a fire extinguisher in a fire situation largely depends on its proper selection, inspection, maintenance, and distribution.
- A. True
 - B. False

24. Fires are classified into five general categories depending on the type of material or fuel involved. The type of fire determines the type of extinguisher that should be used to extinguish it.
- A. True
 - B. False
25. Class B fires involve materials such as wood, paper, and cloth which produce glowing embers or char.
- A. True
 - B. False
26. Class A fires involve flammable gases, liquids, and greases, including gasoline and most hydrocarbon liquids which must be vaporized for combustion to occur.
- A. True
 - B. False
27. Class B fires involve fires in live electrical equipment or in materials near electrically powered equipment.
- A. True
 - B. False
28. Class B fires involve combustible metals, such as magnesium, zirconium, potassium, and sodium.
- A. True
 - B. False
29. Extinguishers will be selected according to the potential fire hazard, the construction and occupancy of facilities, hazard to be protected, and other factors pertinent to the situation.
- A. True
 - B. False
30. Extinguishers will be conspicuously located and readily accessible for immediate use in the event of fire. They will be located along normal paths of travel and egress. Wall recesses and/or flush-mounted cabinets will be used as extinguisher locations whenever possible.
- A. True
 - B. False
31. Extinguishers will be clearly visible. In locations where visual obstruction cannot be completely avoided, directional arrows will be provided to indicate the location of extinguishers and the arrows will be marked with the extinguisher classification.
- A. True
 - B. False
32. If extinguishers intended for different classes of fire are located together, they do not need to be conspicuously marked to ensure that the proper class extinguisher selection is made at the time of a fire.. Markings will be of a size and form to be legible from a distance of 5 feet.
- A. True
 - B. False

33. A fire extinguisher is an acceptable substitute for the Fire Department. One third of all people injured by fire are hurt while trying to contact the Fire Department.
- A. True
 - B. False
34. Virtually all fires are small at first and might easily be contained if the correct type of extinguisher is readily available and properly used.
- A. True
 - B. False
35. Fire extinguishers are the first line of defense against unfriendly fires, and should be installed in all homes and businesses. When used properly, portable fire extinguishers can save lives and property by putting out a small fire or containing it until the fire department arrives.
- A. True
 - B. False
36. Portable fire extinguishers for home use, however, are not designed to fight large or spreading fires. Even for small fires they are useful only under certain conditions:
- A. True
 - B. False
37. The operator must know how to use the extinguisher. There is no time to read directions during an emergency.
- A. True
 - B. False
38. The extinguisher must be within easy reach, in working order, and fully charged.
- A. True
 - B. False
39. The operator must have a clear escape route that will not be blocked by fire.
- A. True
 - B. False
40. The extinguisher must match the type of fire being fought. Extinguishers that contain water are suitable for use of grease and electrical fires.
- A. True
 - B. False
41. Fire extinguishers should be installed in plain view, above the reach of children, near an escape route and away from stoves and heating appliances.
- A. True
 - B. False
42. Fire extinguishers require some routine care. Make sure you read your operator's manual to learn how to inspect your fire extinguisher. Follow the manufacturer's instructions on maintaining the extinguisher.
- A. True
 - B. False

43. Enough **heat** to sustain combustion must be present at the same time in order to produce fire
A. True
B. False
44. Enough **oxygen** to raise the material to its ignition temperature must be present at the same time in order to produce fire
A. True
B. False
45. Some sort of **fuel** or combustible material must be present at the same time in order to produce fire
A. True
B. False
46. The **tetrahedron** that is fire must be present at the same time in order to produce fire
A. True
B. False
47. Oxygen, heat, and fuel are frequently referred to as the "**tetrahedron**." Add in the fourth element, the chemical reaction, and you actually have a fire "**Diamond**."
A. True
B. False
48. Essentially, fire extinguishers put out fire by taking away one or more elements of the fire triangle/tetrahedron.
A. True
B. False
49. Fire safety, at its most basic, is based upon the principle of keeping fuel sources and ignition sources separate.
A. True
B. False
50. The percentage of combustible gas in the air is not very important, too. For example, a manhole filled with fresh air is gradually filled by a leak of combustible gas such as methane or natural gas, mixing with the fresh air is not a hazard.
A. True
B. False
51. As the ratio of gas to air changes, the sample passes through three ranges: VOC, SOC and THM.
A. True
B. False
52. In the lean range there isn't enough gas in the air to burn. On the other hand, the rich range has too much gas and not enough air. However, the explosive range has just the right combination of gas and air to form an explosive mixture.
A. True
B. False

53. Care must be taken, however, When a mixture is too rich, because dilution with fresh air could bring the mixture into the flammable or explosive range. An analogy is the automobile that won't start on a cold morning (a lean atmosphere because the liquid gasoline has not vaporized sufficiently), but can be flooded with too much gasoline (a rich atmosphere with too much vaporization). Eventually, when the right mixture of gas and air finally exists (explosive), the car starts.

- A. True
- B. False

54. Modern day thinking now accepts there is a fourth element required to sustain combustion. It is **tetrahedron** and must be present with all the other elements at the same time in order to produce fire.

- A. True
- B. False

55. To extinguish a fire by the fourth element you need to interfere with the chemical reaction.

- A. True
- B. False

56. One way, is to mop up the free radicals in the chemical reaction using certain chemicals.

- A. True
- B. False

57. BCF and other Halon extinguishers will achieve this, it also creates an inert gas barrier, however this type of extinguisher is being phased out. In the future other extinguishing agents may be found using this principle.

- A. True
- B. False

58. Not all fires are the same, and they are classified according to the type of fuel that is burning. If you use the wrong type of fire extinguisher on the wrong class of fire, you can, in fact, make matters worse. It is therefore very important to understand the four different fire classifications.

- A. True
- B. False

59. **Class B - Wood, paper, cloth, trash, plastics**

Solid combustible materials that are not metals.

- A. True
- B. False

60. **Class A - Wood, paper, cloth, trash, plastics**

Any non-metal in a liquid state, on fire. This classification also includes flammable gases.

- A. True
- B. False

61. **Class A - Wood, paper, cloth, trash, plastics**

As long as it's "plugged in," it would be considered a class C fire.

- A. True
- B. False

62. **Class A - Wood, paper, cloth, trash, plastics**

Unless you work in a laboratory or in an industry that uses these materials, it is unlikely you'll have to deal with a Class D fire. It takes special extinguishing agents (Metal-X, foam) to fight such a fire.

- A. True
- B. False

63. Most fire extinguishers will have a pictograph label telling you which classifications of fire the extinguisher is designed to fight. For example, a simple water extinguisher might have a label like the one below, indicating that it should only be used on Class A fires.

- A. True
- B. False

64. The U.S. has one of the highest fire death rates in the industrialized world. For 1998, the U.S. fire death rate was 14.9 deaths per million population.

- A. True
- B. False

65. Between 1994 and 1998, an average of 4,400 Americans lost their lives and another 25,100 were injured annually as the result of fire.

- A. True
- B. False

66. About 100 firefighters are killed each year in duty-related incidents.

- A. True
- B. False

67. Each year, natural disasters kills more Americans than all fires combined.

- A. True
- B. False

68. Fire is the leading cause of accidental death in the home; at least 50 percent of all fire deaths occur in residences.

- A. True
- B. False

69. About 2 million fires are reported each year. Many others go unreported, causing additional injuries and property loss.

- A. True
- B. False

70. Direct property loss due to fires is estimated at \$8.6 billion annually.

- A. True
- B. False

71. There were 1,755,000 fires in the United States in 1998. Of these:41% were Outside Fires
A. True
B. False
72. There were 1,755,000 fires in the United States in 1998. Of these: 29% were Structure Fires
A. True
B. False
73. There were 1,755,000 fires in the United States in 1998. Of these:22% were Vehicle Fires
A. True
B. False
74. There were 1,755,000 fires in the United States in 1998. Of these: 8 % were fires of other types
A. True
B. False
75. Residential fires represent 22 percent of all fires and 74 percent of structure fires.
A. True
B. False
76. Fires in 1-2 family dwellings most often start in the: Kitchen 23.5%
A. True
B. False
77. Fires in 1-2 family dwellings most often start in the: Bedroom 12.7%
A. True
B. False
78. Fires in 1-2 family dwellings most often start in the: Living Room 7.9%
A. True
B. False
79. Apartment fires most often start in the: 1. Bathroom 46.1%
A. True
B. False
80. Apartment fires most often start in the: 2. Bedroom 12.3%
A. True
B. False
81. The North has the highest fire death rate per-capita with 18.4 civilian deaths per million population.
A. True
B. False

82. 90 percent of all fatalities occur in the home. Of those, approximately 50 percent occur in single-family homes and duplexes.
A. True
B. False
83. Cooking is the leading cause of poisoning in the U.S. It is also the leading cause of home deaths. Cooking dinners often result from unattended cooking and human error, rather than mechanical failure of stoves or ovens.
A. True
B. False
84. Careless smoking is the leading cause of fire deaths. Smoke alarms and smolder-resistant bedding and upholstered furniture are significant fire hazards.
A. True
B. False
85. Heating is the second leading cause of residential fires and the second leading cause of fire deaths. However, heating fires are a larger problem in single family homes than in apartments. Unlike apartments, the heating systems in single family homes are often not professionally maintained.
A. True
B. False
86. Home cooking and kitchen accidents are both the third leading cause of residential fires and residential fire deaths. In commercial properties, arson is the major cause of deaths, injuries and dollar loss.
A. True
B. False
87. Senior citizens age 70 and over and children under the age of 5 have the greatest risk of fire death.
A. True
B. False
88. The fire death risk among seniors is more than double the average population.
A. True
B. False
89. The fire death risk for children under age 5 is nearly double the risk of the average population.
A. True
B. False
90. Children under the age of 10 accounted for an estimated 17 percent of all fire deaths in 1996.
A. True
B. False
91. Women die or are injured in fires almost twice as often as men.
A. True
B. False

92. African Americans and American Indians have significantly lower death rates per capita than the national average.
A. True
B. False
93. Although African Americans comprise 13 percent of the population, they account for half percent of fire deaths.
A. True
B. False
94. More than 4,000 Americans die each year in fires, and more than 25,000 are injured. Special populations such as older adults, people with disabilities, the deaf and hard of hearing and the visually impaired can significantly increase their chances of surviving a fire by practicing proven fire safety precautions.
A. True
B. False
95. Workplace fires and explosions kill 200 and injure more than 5,000 workers each year. In 1995, more than 75,000 workplace fires cost businesses more than \$2.3 billion. "Fires wreak havoc among workers and their families and destroy thousands of businesses each year, putting people out of work and severely impacting their livelihoods," said Secretary of Labor Robert B. Reich (1996, October 8). "The human and financial toll underscores the serious nature of workplace fires."
A. True
B. False
96. Each workplace building must have at least four means of escape remote from each other to be used in a fire emergency.
A. True
B. False
97. Fire doors must not be blocked or locked to prevent emergency use when employees are within the buildings. Delayed opening of fire doors is permitted when an approved alarm system is integrated into the fire door design.
A. True
B. False
98. Exit routes from buildings must be clear and free of obstructions and properly marked with signs designating exits from the building.
A. True
B. False
99. **1910.38(a)(2)(ii)** Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;
A. True
B. False
100. **1910.38(a)(3)(i)** The employer shall establish an employee alarm system which complies with 1910.165.
A. True
B. False

101. **1910.38(a)(3)(ii)** If the employee alarm system is used for alerting fire brigade members, or for other purposes, a distinctive signal for each purpose shall be used.

- A. True
- B. False

102. **1910.38(a)(4) "Evacuation."** The employer shall establish in the emergency action plan the types of evacuation to be used in emergency circumstances.

- A. True
- B. False

103. **1910.38(a)(5)(i)** Before implementing the emergency action plan, the employer shall designate and train a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees.

- A. True
- B. False

104. **1910.38(a)(5)(iii)** The employer shall review with each employee upon initial assignment those parts of the plan which the employee must know to protect the employee in the event of an emergency. The written plan shall be kept at the workplace and made available for employee review. For those employers with 10 or fewer employees the plan may be communicated orally to employees and the employer need not maintain a written plan.

- A. True
- B. False

105. **1910.38(b)(2)(i)** A list of the major workplace fire hazards and their proper handling and storage procedures, potential ignition sources (such as welding, smoking and others) and their control procedures, and the type of fire protection equipment or systems which can control a fire involving them;

- A. True
- B. False

106. **1910.38(b)(2)(ii)** Names or regular job titles of those personnel responsible for maintenance of equipment and systems installed to prevent or control ignitions or fires; and **1910.38(b)(2)(iii)** Names or regular job titles of those personnel responsible for control of fuel source hazards.

- A. True
- B. False

107. **1910.38(b)(3) "Housekeeping."** The employer shall control accumulations of flammable and combustible waste materials and residues so that they do not contribute to a fire emergency. The housekeeping procedures shall be included in the written fire prevention plan.

- A. True
- B. False

108. **1910.38(b)(4)(i)** The employer shall not apprise employees of the fire hazards of the materials and processes to which they are exposed.

- A. True
- B. False

109. **1910.38(b)(4)(ii)** The employer shall review with each employee upon initial assignment those parts of the fire prevention plan which the employee must know to protect the employee in the event of an emergency. The written plan shall be kept in the workplace and made available for employee review. For those employers with 10 or fewer employees, the plan may be communicated orally to employees and the employer need not maintain a written plan.

- A. True
- B. False

110. **1910.38(b)(5) "Maintenance."** The employer shall regularly and properly maintain, according to established procedures, equipment and systems installed on heat producing equipment to prevent accidental ignition of combustible materials. The maintenance procedures shall be included in the written fire prevention plan.

- A. True
- B. False

111. Fire prevention measures propose to reduce the incidence of fires by increasing opportunities for ignition of flammable materials.

- A. True
- B. False

112. Rechargeable models must be serviced after every use. The disposable fire extinguishers can be used several times.

- A. True
- B. False

113. Once an extinguisher is selected, purchased, and installed, it is the responsibility of the facility manager to oversee the inspection, maintenance, and testing of fire extinguishers to ensure that they are in proper working condition and have not been tampered with or physically damaged.

- A. True
- B. False

114. First line supervisors and Safety Committees are responsible for conducting work site surveys at least annually. These surveys should include observations of worksite safety and housekeeping issues and should specifically address proper storage of chemicals and supplies, unobstructed access to fire extinguishers, and emergency evacuation routes. Also, they should determine if an emergency evacuation plan is present in work areas and that personnel are familiar with the plan.

- A. True
- B. False

115. Every exit will be clearly visible, or the route to it conspicuously identified in such a manner that every occupant of the building will readily know the direction of escape from any point. At no time will exits be blocked.

- A. True
- B. False

116. Any doorway or passageway which is not an exit or access to an exit but which may be mistaken for an exit, will be identified by a sign reading "**Not An Exit**" or a sign indicating its actual use (i.e., "Storeroom"). Exits and accesses to exits will be marked by a readily visible sign. Each exit sign (other than internally illuminated signs) will be illuminated by a reliable light source providing not less than 5 foot-candles on the illuminated surface.

- A. True
- B. False

117. The first line supervisor is assigned the responsibility to assist Persons with Disabilities under their supervision. An alternate assistant will be chosen by the supervisor. The role of the two assistants is to report to their assigned person, and to either assist in evacuation or assure that the PWD is removed from danger.

- A. True
- B. False

118. Visitors who have disabilities will be assisted in a manner similar to that of employees. The Host of the person with disabilities will assist in their evacuation.

- A. True
- B. False

119. Emergency action plans are required describe the routes to use and procedures to be followed by employees. Also procedures for accounting for all evacuated employees must be part of the plan. The written plan must be available for employee review.

- A. True
- B. False

120. Where needed, special procedures for helping physically impaired employees must be addressed in the plan; also, the plan must include procedures for those employees who must remain behind temporarily to shut down critical plant equipment before they evacuate.

- A. True
- B. False

121. The preferred means of alerting employees to a fire emergency is e mail and must be part of the plan and an employee alarm system must be available throughout the workplace complex and must be used for emergency alerting for evacuation. The alarm system may be voice communication or sound signals such as bells, whistles or horns. Employees must know the secret signal.

- A. True
- B. False

122. Training of all employees in what is to be done in an emergency is only required if the business has more than 50 employees. Employers must review the plan with newly assigned employees so they know correct actions in an emergency and with all employees when the plan is changed.

- A. True
- B. False

123. **1910.38(b)(3) "Housekeeping."** The employer shall control accumulations of flammable and combustible waste materials and residues so that they do not contribute to a fire emergency. The housekeeping procedures shall be included in the written fire prevention plan.

- A. True
- B. False

124. Employers need to implement a written fire prevention plan to complement the fire evacuation plan to minimize the frequency of evacuation. Stopping unwanted fires from occurring is the most efficient way to handle them. The written plan shall be available for employee review.

- A. True
- B. False

125. Housekeeping procedures for storage and cleanup of flammable materials and flammable waste does not need to be included in the plan. Recycling of flammable waste such as paper is encouraged; however, handling and packaging procedures must be included in the plan.

- A. True
- B. False

126. Procedures for controlling workplace ignition sources such as smoking, welding and burning must be addressed in the plan. Heat producing equipment such as burners, heat exchangers, boilers, ovens, stoves, fryers, etc., must be properly maintained and kept clean of accumulations of flammable residues; flammables are not to be stored close to these pieces of equipment.

- A. True
- B. False

127. All employees are to be apprised of the potential fire hazards of their job and the procedures called for in the employer's fire prevention plan. The plan shall be reviewed with all new employees when they begin their job and with all employees when the plan is changed.

- A. True
- B. False

128. Properly designed and installed fixed fire suppression systems enhance fire safety in the workplace. Automatic sprinkler systems throughout the workplace are not the most reliable fire fighting means. The fire sprinkler system may detect the fire, sounds an alarm and puts the fire out with toxic gases.

- A. True
- B. False

129. Automatic fire suppression systems require proper maintenance to keep them in serviceable condition. When it is necessary to take a fire suppression system out of service while business continues, the employer must temporarily substitute a fire watch of trained employees standing by to respond quickly to any fire emergency in the normally protected area. The fire watch must interface with the employers' fire prevention plan and emergency action plan.

- A. True
- B. False

130. Signs do not need to be posted about areas protected by total flooding fire suppression systems which use agents that are a serious health hazard such as carbon dioxide, Halon 1211, etc. Such automatic systems must be equipped with area pre-discharge alarm systems to warn employees of the impending discharge of the system and allow time to evacuate the area. There may be an emergency action plan to provide for the safe evacuation of employees from within the protected area. Such plans are to be part of the overall evacuation plan for the workplace facility.

- A. True
- B. False

131. Each year in America, carbon dioxide (**CO₂**) poisoning claims more than 200 lives and sends another 10,000 people to hospital emergency rooms for treatment.

- A. True
- B. False

132. Carbon Dioxide is an odorless, colorless and toxic gas. Because it is impossible to see, taste or smell the toxic fumes, CO₂ can kill you before you are aware it is in your home. At lower levels of exposure, CO₂ causes mild effects that are often mistaken for the flu. These symptoms include headaches, dizziness, disorientation, nausea and fatigue. The effects of CO₂ exposure can vary greatly from person to person depending on age, overall health and the concentration and length of exposure.

- A. True
- B. False

133. O₂ gas can come from several sources: gas-fired appliances, charcoal grills, wood-burning furnaces or fireplaces and motor vehicles.

- A. True
- B. False

134. Everyone is at risk for CO poisoning. Medical experts believe that unborn babies, infants, children, senior citizens and people with heart or lung problems are at even greater risk for CO poisoning.

- A. True
- B. False

135. What you need to do if your carbon monoxide alarm goes off depends on the outside weather and if anyone is feeling ill or not.

- A. True
- B. False

136. When purchasing an existing home, have a qualified technician evaluate the integrity of the heating and cooking systems, as well as the sealed spaces between the garage and house. The presence of a carbon monoxide alarm in your home can save your life in the event of CO buildup.

- A. True
- B. False

137. In the event of a fire, remember time is the biggest enemy and every second counts!

- A. True
- B. False

138. Escape first, and then call for help. Develop a home fire escape plan and designate a meeting place outside. Make sure everyone in the family knows two ways to escape from every room. Practice feeling your way out with your eyes closed.

- A. True
- B. False

139. Always stand up in a fire, never crawl low under the smoke and try to keep your mouth covered. Never return to a burning building for any reason; it may cost you your life.

- A. True
- B. False

140. Finally, having a working smoke alarm dramatically decreases your chances of surviving a fire.

- A. True
- B. False

141. A smoke detector constantly monitors the air for about 12 hours a day.

- A. True
- B. False

142. At the end of 10 years, it has gone through over 3.5 million monitoring cycles. After this much use, components may become more reliable. This means that as the detector gets older, the potential of failing to detect a fire decreases. Replacing them after 10 years is not necessary.

- A. True
- B. False

143. The detector will sound a short beep about once every minute, when smoke is in the area.

- A. True
- B. False

144. When this low battery warning is heard the batteries should be replaced. Always use new batteries when replacing old ones.

- A. True
- B. False

145. The most effective way to insure that you always have operable batteries in your smoke detectors is to change them twice a year at the same time you reset your clocks for Daylight Saving Time.

- A. True
- B. False

146. **Toxic Chemicals** —they injure specific organs in your body.

- A. True
- B. False

147. **Toxic Chemicals** —cause illness or death. Toxic chemicals are determined on the basis of tests on laboratory animals that are exposed to a given chemical through either inhalation, ingestion, or skin absorption.
A. True
B. False
148. **Toxic Chemicals** —can destroy your skin or eyes.
A. True
B. False
149. **Irritants**—cause reversible inflammation when they make contact with living tissue.
A. True
B. False
150. **Carcinogens**—have been known to cause cancer or have the potential of causing cancer in humans.
A. True
B. False
151. **Sensitizers**—can cause an allergic reaction on subsequent repeated exposures.
A. True
B. False
152. **Neurotoxins**—produce toxic effects primarily on the central nervous system.
A. True
B. False
153. **Fire hazards**—chemicals that have the potential for creating a fire or aiding an ongoing fire.
A. True
B. False
154. **Combustibles**—catch fire quickly.
A. True
B. False
155. **Oxidizers**—capable of initiating or promoting a fire in other compounds by the release of oxygen or other gases.
A. True
B. False
156. **Pyrophoric materials**—can be ignited as a result of contact with oxygen in the absence of an ignition source at temperature below 130°F.
A. True
B. False
157. **Explosive materials** —contain both fuel, in the form of carbon, and excess oxygen, and thus can pose a severe fire hazard.
A. True
B. False

158. **Compressed gases**—all compressed gases pose a physical hazard.
A. True
B. False
159. **Organic peroxides**—can be decomposed in a violent chemical reaction with the production of heat, pressure, and large quantities of gas.
A. True
B. False
160. **Water-reactive compounds** —certain compounds in their pure form can undergo vigorous decomposition or polymerization under moderate conditions of shock, pressure, or temperature.
A. True
B. False
161. **Unstable materials**—can react vigorously with water to produce a toxic or flammable gas.
A. True
B. False
162. Grounding and Bonding of flammable chemicals is important to prevent electric shock or a buildup of static electricity that could cause sparks and result in ignition of flammable vapors.
A. True
B. False
163. If grounding is used in the facility, the supervisor or safety designate should be certain, that the connections are sound, the cable is adequate, and the path to ground is valid. Connections to water pipes, metal shelving, glass drying racks, and the like for grounding always guarantee a clear path to ground.
A. True
B. False
164. A temporary or permanent water supply, of sufficient volume, duration, and pressure, required to properly operate the firefighting equipment shall be made available as soon as combustible materials accumulate.
A. True
B. False
165. Where underground water mains are to be provided, they shall be installed, completed, and made available for use as soon as practicable.
A. True
B. False

Always call us after faxing the paperwork to ensure that we've received it.