

Choose the correct answer to each of the following questions:

1. Characteristics of hydrogen sulfide include?
  - a. Explosive, highly toxic, and can be liberated from pools of stagnant water
  - b. Irrespirable when greater than 10%
  - c. Supports combustion with oxygen
2. What is the explosive range of hydrogen sulfide?
  - a. 4.3% to 45.5%
  - b. 12.5% to 74.2%
  - c. 5% to 15% in at least 12.1 % oxygen
3. Which of the following is not true of sulfur dioxide?
  - a. Explosive
  - b. Highly toxic
  - c. Highly soluble in water
4. Gas readings should be taken?
  - a. Only when directed by the command center
  - b. At all intersections, any dead end or face areas, and at the furthest point of travel in an entry or heading
  - c. Where explosive gases are encountered
5. Accumulations of hydrogen in the mine atmosphere are dangerous because hydrogen?
  - a. Is highly toxic
  - b. Is highly soluble
  - c. Is highly explosive
6. Line brattice is use to?
  - a. Keep intake air from short circuiting
  - b. Channel intake air from last open crosscut to the working face
  - c. Regulate airflow in the intake split
7. Under what conditions might your team captain order your team back the fresh air base immediately?
  - a. A fire that has been extinguished
  - b. Damages to the permanent ventilation controls
  - c. Hazardous roof that cannot be secured
8. What hazards should the team consider when fighting a mine fire directly?
  - a. Explosive gases, heat, smoke, steam, toxic and asphyxiating gases
  - b. CO above 5 ppm
  - c. O2 greater than 19.5%
9. The first indication that an explosion has occurred are often similar to?
  - a. An inundation of water
  - b. A fan stoppage
  - c. A large roof fall
10. Burning materials that give off extremely toxic gases in addition to carbon monoxide are?
  - a. The coal seam
  - b. Hydraulic fluids
  - c. Neoprene and other synthetic rubber compounds

11. Foam generators are effective in controlling mine fires in that they?
  - a. Cool the burning materials
  - b. Are not effective if set up long distances from the fire area
  - c. Elevate the oxygen reaching the fire area
12. Nonmetallic tubes or pipes are inserted in temporary and permanent seals for the purpose of?
  - a. Checking for smoke
  - b. Bleeding off excessive pressure from the sealed area
  - c. Collecting air samples from the sealed area
13. The purpose of rescue team exploration is to?
  - a. Determine conditions underground and locate missing miners
  - b. Serve as a back up team in the command center
  - c. Open doors in stoppings
14. The amount of coal dust suspended in the mine atmosphere is most important because?
  - a. It can alter the explosive range of methane
  - b. It can affect the specific gravity of oxygen
  - c. Coal dust lowers the oxygen content
15. During exploration, the main fan?
  - a. Should be turned on when the team encounters mine gases
  - b. Turned off until needed
  - c. Should be kept running and continually monitored