

**SOUTHWEST WYOMING MUTUAL AID MINE RESCUE CONTEST  
GREEN RIVER, WY  
JUNE 10-13, 2014**

**TEAM TRAINER TEST**

Name: \_\_\_\_\_

Team: \_\_\_\_\_

1. Under Section \_\_\_\_\_ of the Mine Act of 1977, no miner who is ordered withdrawn for not having the requisite safety training shall suffer a loss of compensation during the period necessary for such miner to receive training.
  - a. 103(i)
  - b. 103(j)
  - c. 104(g)
  - d. 107(a)
  
2. Section \_\_\_\_\_ of the Mine Act of 1977 grants the authorized representative broad authority to take whatever action, including the issuance of order, that the representative deems appropriate to protect the life of any person.
  - a. 103(i)
  - b. 103(j)
  - c. 103(k)
  - d. 107(a)
  
3. Except where alternative compliance is permitted under § 49.3 or § 49.4, no mine served by a mine rescue team shall be located more than two hours ground travel time from the mine with which the mine rescue team is associated.
  - a. True
  - b. False

4. The Hoist signal to lower slowly with caution:
  - a. 1-2-1 Bell
  - b. 3-3-1 Bells
  - c. 3-3-2 Bells
  - d. 3-3-3 Bells
  
5. For the purposes of contest work, no barricade will be breached without ventilating in front of the barricade if:
  - a. Carbon Monoxide exceeds 0.12%
  - b. Oxygen is above 17.0%
  - c. Sulfur Dioxide exceeds 50 ppm
  - d. Hydrogen Sulfide exceeds 50 ppm
  
6. Regulating air flow to a fire is considered an air change.
  - a. True
  - b. False
  
7. All gas detectors have the same maximum range for CO.
  - a. True
  - b. False
  
8. IR-type methane sensors over-range at 5% methane
  - a. True
  - b. False
  
9. Four gas detector that measure up to 9,999 ppm CO only are required in each mine rescue station.
  - a. True
  - b. False
  
10. An LEL-type methane sensor is not appropriate for a mine rescue station
  - a. True
  - b. False

11. Positional asphyxia is the most serious complication associated with improperly restraining uncooperative or combative patients.
  - a. True
  - b. False
  
12. Energy from a blunt force that is transferred along the axis of a bone and causes an injury farther along the extremity is called:
  - a. Twisting force
  - b. Direct force
  - c. Referred pain
  - d. Indirect force
  
13. Abnormal posturing including abnormal extension or flexion is a sign of minor head and/or spine injury.
  - a. True
  - b. False
  
14. A patient who presents with a probable spine injury with diaphragmatic breathing, movement and sensation in hands, and cannot move or raise legs is likely to have a spinal injury:
  - a. To lower spinal cord
  - b. Somewhere below neck
  - c. In neck
  - d. None of the above
  
15. Using the START triage system, a person with respiration greater than 30 per minute and radial pulse is present would be tagged:
  - a. Immediate
  - b. Delayed
  - c. Minor
  - d. Deceased

16. Which is not a common surface arrangement that should be considered during a rescue and recovery operation?
- Food and Sleeping Quarters
  - Laboratory
  - Medical Facilities
  - Waiting room for both family members and members of the press
17. Why is it important to establish a clear chain of command?
- To make it easier to determine who is liable in an accident
  - So rescue and recovery work will be well coordinated
  - To approve overtime for mine rescue teams
  - So MSHA will be happy
18. Given equal concentrations of gasses and constant ventilation, which of the following gases will diffuse most quickly:
- Methane
  - Hydrogen Sulfide
  - Nitrogen dioxide
  - Sulfur dioxide
19. \_\_\_\_\_ is not soluble in water?
- Hydrogen
  - Hydrogen Sulfide
  - Methane
  - Radon
20. High hydrogen levels could indicate:
- Proper ventilation around battery charging stations
  - Mine fire
  - Decay of organic matter
  - None of the above
21. The purpose of a bulkhead is to direct air throughout the mine and to keep intake air from short-circuiting to the exhaust air before ventilating the working places.
- True
  - False

22. Two common tools for measuring airflow are:
- a. Anemometer and diffusion tube
  - b. Windsock and sling psychrometer
  - c. Anemometer and smoke tubes
  - d. None of the above
23. Whenever possible during exploration, the mine should be entered through the safest exhaust airway.
- a. True
  - b. False
24. Tying in during exploration is important to ensure:
- a. The team is never forward of an unexplored area
  - b. To get more overtime
  - c. The conditions are known in every entry and drift
  - d. Both a and c
25. A caplamp can be held at waist-level to aide in traveling in smoke.
- a. True
  - b. False
26. What type of fire is a kerosene fire?
- a. Class A
  - b. Class B
  - c. Class C
  - d. Class D
27. Fog spray water nozzles are best used to fight fires that are close.
- a. True
  - b. False
28. If a victim is lying face down, the front of the body will likely be dark.
- a. True
  - b. False

29. Recovering bodies after a disaster is important to the families to:
- a. Provide emotional closure
  - b. Insure that insurance and legal proceedings can go forward
  - c. Both A & B
  - d. None of the above
30. What is the advantage of progressive ventilation:
- a. Faster than direct ventilation
  - b. Gas conditions can be carefully controlled
  - c. Teams get more overtime
  - d. Ventilates entire areas or levels quickly