

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

MINE RESCUE WRITTEN TEST

Name: _____


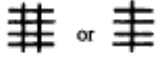
Team: _____


1. What is triage?
 - a. A system of assigning priorities of medical treatment to injured persons.
 - b. A system of working in teams of 3 to explore
 - c. A system of assigning priorities of psychological treatment to injured persons
 - d. None of the above

2. Which of the following is true?
 - a. A decrease in temperature causes a gas to contract
 - b. A decrease in pressure causes a gas to expand
 - c. Both A and B
 - d. None of the above

3. A rise in temperature causes a gas to diffuse more slowly.
 - a. True
 - b. False

4. Where should you hold your portable detector when measuring oxygen deficiency?
 - a. Breathing zone
 - b. Above head
 - c. Near the floor
 - d. Waist Level

5. Approximately how long will it take to kill a person exposed to 500 ppm carbon monoxide?
- 12 hours
 - 6 hours
 - 3 hours
 - 15 minutes
6. Which of the following is not an explosive gas?
- Carbon monoxide
 - Methane
 - Hydrogen sulfide
 - Oxygen
7. Detecting small concentrations of heavy hydrocarbons could indicate a mine fire.
- True
 - False
8. Small quantities of hydrogen reduce the explosive range of other gases.
- True
 - False
9.  is the map symbol for:
- Box check
 - Main fan
 - Overcast
 - Undercast
10.  is the map symbol for:
- Door
 - Damaged bulkhead
 - Track
 - Damaged airline

11.  is the map symbol for:
- Furthest point of advance
 - Air line
 - Fire line
 - Auxiliary fan and tubing
12. The time a team works underground is usually limited to:
- 1 hour
 - 2 hours
 - 4 hours
 - As long as they have oxygen
13. It is only essential to tie in when you do not know where survivors are located.
- True
 - False
14. A survivor who has lost his left hand but the bleeding is controlled should be classified as:
- First Priority
 - Second Priority
 - Third Priority
 - Delayed Priority
15. A survivor who has a fractured hand, minor bleeding, first-degree burns on 10% of his body, and chest injuries should be classified as:
- First Priority
 - Second Priority
 - Third Priority
 - Immediate Priority
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:
- Anemometer and diffusion tube
 - Windsock and sling psychrometer
 - Anemometer and smoke tubes
 - None of the above

23. Whenever possible during exploration, the mine should be entered through the safest exhaust airway.
- True
 - False
24. Tying in during exploration is important to ensure:
- The team is never forward of an unexplored area
 - To get more overtime
 - The conditions are known in every entry and drift
 - Both a and c
25. A caplamp can be held at waist-level to aide in traveling in smoke.
- True
 - False
26. What type of fire is a kerosene fire?
- Class A
 - Class B
 - Class C
 - Class D
27. Fog spray water nozzles are best used to fight fires that are close.
- True
 - False
28. If a victim is lying face down, the front of the body will likely be dark.
- True
 - False
29. Recovering bodies after a disaster is important to the families to:
- Provide emotional closure
 - Insure that insurance and legal proceedings can go forward
 - Both A & B
 - 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