

2021 Craig, CO Mine Rescue Written Test Day 2 KEY

Name _____

Team _____

1. From Equipment Required by Law: The regulations state: One portable mine rescue communication system (approved under part 23 of this title) or a sound-powered communication system. (ii) These communication systems shall be at least _____ feet in length.
 - a. 1000
 - b. 2000
 - c. 1500

2. A gas that is normally found near the roof or in high places in the mine is said to have a low:
 - a. level of solubility
 - b. level of stratification
 - c. specific gravity

3. Atmospheric pressure and temperature are important factors because they:
 - a. affect the rate of diffusion of a gas by ventilation
 - b. can cause false readings on gas detection instruments
 - c. lower oxygen content in the mine

4. Acetylene would normally be found in a mine atmosphere where:
 - a. battery charging stations are located
 - b. methane has burned or exploded in air with a lowered oxygen content
 - c. leakage has occurred from adjacent oil or gas wells

2021 Craig, CO Mine Rescue Written Test Day 2 KEY

5. A characteristic of hydrogen sulfide includes:
- is an asphyxiant
 - is not explosive
 - can be liberated from pools of stagnant water
6. Gases that are neither toxic nor explosive:
- are not found in mine atmospheres
 - are not dangerous
 - can be dangerous because they can displace oxygen
7. Under what conditions would a team use a smoke tube to determine air velocities? Answer: The smoke tube is used to determine the direction and velocity of slow- moving air, below _____ feet per minute.
- 2000.
 - 120.
 - 1000.
8. Why would a team need to be able to build temporary stoppings quickly and effectively? Answer: Re-ventilation is essential for the advancement of the Fresh Air Base and the flushing out of _____ gases.
- toxic.
 - dangerous
 - irrespirable
9. Mine rescue teams should alter existing ventilation:
- Only when directed to do so by the Command Center.
 - When they encounter smoke.
 - When they encounter high concentrations of methane.

2021 Craig, CO Mine Rescue Written Test Day 2 KEY

10. During mine rescue team explorations, the main fan:
- Should be kept running.
 - Should be continually monitored.
 - Both of the above.
11. Mine rescue teams erecting temporary stoppings/Bulkheads in atmosphere with elevated methane readings should:
- Mine rescue teams should never enter such atmosphere.
 - Leave a corner of the stopping / Bulkheads open for the methane to exit.
 - Use non-sparking tools, nails, and spads.
12. Temporary stoppings/Bulkheads built in a passageway should be placed at least 4 to 6 feet into the passageway in order that:
- Sufficient space is available to construct a permanent stopping/Bulkhead.
 - It will be protected from further explosions.
 - It will not be affected by fire if a fire should spread to that crosscut.
13. As you advance, report the condition of ventilation controls and _____ . If they are damaged, be specific as to what type of damage they've received and how extensive it is.
- roof conditions.
 - gases encountered.
 - auxiliary fans.

2021 Craig, CO Mine Rescue Written Test Day 2 KEY

14. Class K fires - Fires that involve combustible cooking media such as oils and grease commonly found in commercial kitchens. A special wet chemical extinguishing agent should be used for extinguishing and suppressing these extremely hot fires that have the ability to _____.
- a. suffocate.
 - b. explode.
 - c. **reflash.**
15. Fire tetrahedron - Tetrahedron used to illustrate the four elements necessary for fire to occur: fuel, oxidizing agent, heat, and _____ chemical chain reaction.
- a. unrestricted
 - b. **uninhibited**
 - c. uncontained