

LOVELAND TEAM TECH 2023 QUESTIONS

Team name:

Name:

1. The air we normally breathe is a mixture of gas. Clean dry air at sea level is made up of ___ percent nitrogen and ___ percent oxygen.
 - a. 79 to 21
 - b. 78 to 21
 - c. 78 to 19.5
2. What is the specific gravity of oxygen?
 - a. 1.0125
 - b. 1.1025
 - c. 1.1054
3. Where carbon dioxide is commonly found?
 - a. Near roof
 - b. Near floor
 - c. Waist level
4. Methane is flammable. Its explosive range is 5 to 15 percent when there is at least ___ percent oxygen.
 - a. 12.1
 - b. 10.1
 - c. 19.5
5. What is the specific gravity of Carbon Monoxide?
 - a. 1.5291
 - b. 0.9674
 - c. 0.9672
6. Increased _____ levels are often present after explosives have been detonated.
 - a. Nitrogen
 - b. Hydrogen
 - c. Sulfur
7. Oxides of nitrogen are _____ .
 - a. Non Toxic
 - b. Highly Toxic
 - c. Skin irritants

8. What is the specific gravity of Hydrogen?
 - a. 1.1906
 - b. 0.0695
 - c. 2.2638
9. What is the explosive range of Hydrogen?
 - a. 4 to 75.2 %
 - b. 5 to 74.2%
 - c. 4 to 74.2%
10. Smoke is a result of _____.
 - a. Explosion
 - b. Fire
 - c. Combustion
11. _____ is a mixture of Carbon Monoxide and air which results from mine fires.
 - a. Whitedamp
 - b. Afterdamp
 - c. Blackdamp
12. Stinkdamp is a mixture of _____ and air.
 - a. Nitrogen Dioxide
 - b. Sulfur Dioxide
 - c. Hydrogen sulfide
13. The traverse method is used when?
 - a. Taking a reading with a smoke tube
 - b. Taking a reading at a regulator
 - c. Taking a reading with an anemometer
14. Two instruments commonly used to measure velocity of air flow in a mine.
 - a. Smoke tube and Magnehelic
 - b. Smoke tube and Anemometer
 - c. Anemometer and Magnehelic
15. POGO sticks are devices that are used.
 - a. As supports on which brattice cloth can be hung
 - b. As an extension for reaching high places to take air readings
 - c. As roof control subsidence indicators