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| Round 1 | |
| Cat 1 - Hot Stuff | |
| 100 | One method of indirect firefighting is flooding a sealed area with this.  What is water? |
| 200 | For a fire to be treated as these “Classes”, power must first be cut off to electrical equipment.  What are Class “A” or “B” fires? |
| 300 | These “Class” fires involve combustible liquids.  What are Class “B” fires? |
| 400 | The name given to small hydrogen explosions, fairly common in firefighting.  What are hydrogen pops? |
| 500 | Electrical fires are best extinguished by nonconducting agents such as these.  What are Carbon Dioxide and certain dry chemicals? |

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| Round 1 | |
| Cat 2 - Moving Air | |
| 100 | These are used to permit two air currents to cross without the intake air short-circuiting into the return.  What are overcasts? |
| 200 | Once ventilation has been re-established, these people can take over the rehabilitation and cleanup efforts.  What are nonapparatus crews? |
| 300 | Under no circumstances should ventilation be altered without orders to do so from here.  What is the command center? |
| 400 | These must be taken in the returns near the fire area to determine if the mine atmosphere is potentially explosive.  What are gas readings? |
| 500 | Before doing this, the team should make sure the main fan is running, a guard is monitoring the operation of the fan, and that tests are being made at the main return for any gases that may be present in the mine.  What is go underground? |

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| Round 1 | |
| Cat 3 - Air We Breathe | |
| 100 | Lighter than air, this is Methane’s specific gravity.  What is 0.5545? |
| 200 | In above normal concentrations, Nitrogen is this.  What is an asphyxiant? |
| 300 | Gases with specific gravities greater than 1.0 tend to seek these.  What are low places? |
| 400 | Although not flammable or explosive, this gas is a supporter of combustion.  What is Oxygen? |
| 500 | A mixture of this reduces the explosive limit of methane.  What is coal dust in air? |

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| Round 1 | |
| Cat 4 - Getting Around | |
| 100 | When searching for survivors, it is important to do both of these.  What is look and listen for clues? |
| 200 | After going underground to explore for a fire or fight a fire, the team should know about these in the affected area.  What are possible ignition sources? |
| 300 | When traveling though this, all teams should hold on to the lifeline or be linked together by means of a linkline.  What is smoke? |
| 400 | Pools of water can release these when they are stirred up.  What are water soluble gases? |
| 500 | These are important because they may contain information about the whereabouts of survivors.  What are dinner buckets? |

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| Round 1 | |
| Cat 5 - The Basics | |
| 100 | In mines where this coal is left, a fire will spread more rapidly.  What is head coal? |
| 200 | Gases with specific gravities less than 1.0 will seek these places.  What are high places? |
| 300 | Explosions in coal mines are most often caused by methane and this material, or a combination of the two.  What is coal dust? |
| 400 | This many pulls on the lifeline means the team is going to retreat or move toward the No. 5 person.  What are 3 pulls? |
| 500 | This is the second priority of rescue and recovery operations.  What is the rescue of survivors? |

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| Round 1 | |
| Cat 6 - After the Fact | |
| 100 | Smoke may be explosive if it contains a sufficient amount of these.  What are hydrocarbons? |
| 200 | In situations too hazardous for teams to explore and re-ventilate safely, teams may be instructed to do this.  What is seal the area? |
| 300 | The main objective of work to put the affected area of the mine back in operation.  What is recovery? |
| 400 | This group is responsible for choosing the exact sites within headings for building seals?  What is the team? |
| 500 | Process of systematically exploring all crosscuts and adjacent areas as you advance is called this.  What is tying in? |

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| Round 2 | |
| Cat 1 – Science 101 | |
| 200 | A characteristic shared by CO, H2S, CH4 and H2.  What are explosive gases? |
| 400 | It’s STEL is 200 ppm and IDLH is 1500 ppm.  What is Carbon Monoxide? |
| 600 | These are physical properties that help identify gases during barefaced exploration.  What are color, odor and taste? |
| 800 | Extinguisher effective in fighting Class A, B and C fires.  What is a monoammonium phosphate extinguisher? |
| 1000 | These three elements must be present for an explosion to occur.  What are fuel, oxygen, and heat (ignition)? |

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| Round 2 | |
| Cat 2- Explorers Club | |
| 200 | Opening of these prematurely can cause a re-ignition of a fire or an explosion.  What are seals? |
| 400 | The basic principle of mine ventilation is that air always moves in this manner.  What is from high to low pressure regions? |
| 600 | The monitoring of the mine atmosphere for the presence of oxygen, methane  and carbon monoxide is an important element of this.  What is team exploration? |
| 800 | Whenever possible, this is best way to enter the mine.  What is by way of the safest intake airway? |
| 1000 | Air courses separated by these must be examined on both sides (tied in)  where accessible to assure the safety of the team.  What are stoppings? |

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| Round 2 | |
| Cat 3 – FAB Plus | |
| 200 | A fresh-air base is established at the point where conditions no longer permit this.  What is barefaced exploration? |
| 400 | Your captain may order the team to return immediately to the fresh-air base if this occurs.  What is if a team member's apparatus malfunctions? |
| 600 | The fresh air base should be situated where it can be linked to the command center by means of this.  What is a communication system? |
| 800 | This is a 15 minute TWA exposure which should not be exceeded at any time during a work day for a gas.  What is the STEL? |
| 1000 | Before a fresh-air base is advanced, gas tests should be made in these between the old and new fresh-air base.  What are all dead ends and high places? |

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| Round 2 | |
| Cat 4 – Before & After | |
| 200 | When doing this, you should be careful to ensure that there are no abrupt changes in the ventilation over the fire area.  What is sealing a mine fire? |
| 400 | The lower explosive limit of this gas is 4.0 percent.  What is Hydrogen? |
| 600 | This gas is formed when methane is burned or heated in air having a low oxygen content.  What is Acetylene? |
| 800 | Breathing air containing this causes violent panting and can lead to death.  What is 10 percent carbon dioxide? |
| 1000 | These are held before and after a mine rescue team goes underground.  What are briefing and debriefing sessions? |

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| Round 2 | |
| Cat 5 – Emergency 9-1-1 | |
| 200 | A jump in the pressure recording chart for the main fan may be an indication.  What is an explosion? |
| 400 | This gas is produced by the incomplete combustion of carbon materials during fires and explosions.  What is Hydrogen? |
| 600 | Explosions, fires, and other disasters frequently result in these.  What are weakened roof and rib conditions? |
| 800 | The most positive indicator of the origin of this is the direction in which blocks have moved in or from stoppings across entries near intersections.  What is an explosion? |
| 1000 | This is a mixture of carbon dioxide, nitrogen and air which is oxygen deficient.  What is blackdamp? |

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| Round 2 | |
| Cat 6 - Hodgepodge | |
| 200 | The period of time team members should refrain from drinking alcoholic beverages before they get under oxygen.  What is 12 to 18 hours? |
| 400 | Rock dust is most successfully used to fight a fire by applying it like this.  What is by hand or by shoveling it onto the fire? |
| 600 | Its first indication may be reports from miners who felt a sudden movement of air, or notice smoke or dust.  What is an explosion? |
| 800 | This is used only in fighting Class A and B fires.  What is foam? |
| 1000 | This is the average concentration for a normal 8 hour workday and a 40 hour workweek, to which workers may be repeatedly exposed, day after day, without adverse effect to a gas.  What is the TLV-TWA? |

Final Jeopardy

Category: Safety Precautions

Do this to all conductive objects such as cables, track, trolley wire, water lines, belt structures, etc., extending into the explosion area at or outby the fresh-air base before explorations are started.

What is sever or remove?