Video Quiz

Video Title: Preventing Rock Falls in Underground Mining
Length: 20:00
Vendor: NIOSH

Synopsis:

1. Nearly 50, 100, 200, 500, 5000 miners have been killed during the 1990s due to Rock Falls.
2. About 300, 3000, 30000, 300,000 miners were badly injured during the 1990s due to Rock Falls.
3. Nearly 20, 40, 60, 80% of underground mine fatalities are rock-fall related.
4. Mine roofs and ribs are most unstable a) after the blast, b) after mucking, c) after bolting, d) after loading holes.
5. The most important skill an underground miner can learn for his safety is: a) how to visually inspect roofs, b) how to bar loose, c) how to identify loose material, d) how to provide adequate ground support, e) how to drill so as not to cause ground falls.
6. Blasting is a major cause of ground support failure. True__, False__
7. Hosing down the back and ribs is crucial to identifying unstable ground. True__, False__
8. A bootleg is a) a bottle of moonshine, b) a hole left after blasting, c) powder which didn’t go off during the shot, d) an unstable section of the roof or rib in the shape of a man’s boot.
9. A bootleg is treated by a) barring it loose, b) scaling around it with a loader bucket, c) drilling into it and removing it, d) identifying and marking it, e) washing it out with a water hose.
10. Scaling can be done with a loader bucket under some circumstances. True__, False__
11. A scaling bar is a long shaft with a chisel point at one end that is usually bent 15 to 30 degrees. True__, False__
12. A scaling bar should be a) 5 feet longer than the height of the heading, b) the height of the heading, c) 2 feet shorter than the height of the heading.
13. In some headings more than one scaling bar may be required. True__, False__
14. Scaling should always be done first under unsupported roof. True__, False__
15. Scaling should be done first at the face and working back toward bolted ground. True__, False__
16. It is OK to scale from the top of the muck pile. True__, False__
17. Loose rock often has a hollow sound when hit with a scaling bar. True__, False__
18. If sounding indicates there is no loose, it should be followed by mucking, bolting and then drilling. True__, False__
19. Once inspection indicates that the roof is solid, it is safe to go under the unbolted roof and install roof support. True__, False__
20. The roof control plan specifies the (minimum, maximum) support required. True__, False__
21. It is important to change drill patterns on subsequent rounds. True__, False__
22. The following are signs of unstable ground a)___________, b)___________, c)___________, d)___________, e)___________, f)___________, g)___________, h)___________
23. A miner has a responsibility to barricade an unsafe area before checking with his supervisor. True__, False__

1) 200, 2) 30,000, 3) 60, 4) a, 5) a,b,c, 6) T, 7) T, 8) b, 9) T, 10) T, but the area should also be inspected by barring and visually, 11) T, 12) c, 13) T, 14) F, 15) F, 16) T, 17) T, 18) F – Barring & visual inspection should precede and follow mucking 19) F – stay under roof support while bolting, 20) minimum, 21) T – otherwise you may hit missed shots, 22) Loose bolts, loose material around bolt plates, slacking or crushing of ribs, movement of fractures or slip faces, bulges in mesh, cracks in shotcrete, dry spots on roof or rib, loose material on floor, 23) T – then check with supervisor.