Electrical Safety Info Section

1. What are the three items required for a fire to start? Fuel, oxygen, heat source

2. How do you discharge static electricity from your body and clothes before entering a tank? Touch the bare metal of the tank

3. Why are low-voltage lamps used in flammable environments? Reduced risk of spark

4. How are workers typically protected from moving parts on machinery? Covers or guards

5. What are some of the reasons for removing guards or covers from moving parts on machinery? Service, adjustment, or inspection

6. What is the extra hazard involved with shafts that move at high speed? Can appear stopped

7. Which visual devices can be used to determine if a shaft is moving? Strobe light or revolution counter

8. Which part of a rotating pulley is the most dangerous if it is not properly sized and installed? Setscrew

9. What are the most obvious hazards associated with working in construction trenches? Drive-in, step-in, or cave-in

10. What is the minimum distance for a fatal fall? 1.5 – 2m

11. In what ways can chemicals harm us? Burning, blindness, or can be fatal over time

12. Why are chemical hazards more dangerous than physical hazards? Often not seen

13. List the personal protective equipment associated with chemical hazards? Face mask filter, portable air supply unit, and protective clothing

14. Which part of the body is most affected by an atmosphere containing heavy metal? Lungs

15. Where do we find rules about a safe working environment? Occupational Health & Safety Act
16. What is the first precaution that should be taken before working on a power tool? *Disconnect the supply power*

17. What two precautions should be taken when working on the exposed current-carrying parts of an electrical circuit? *Shut off and lock out*

18. What precautions should be taken before drilling a hole? *Check for wires and pipes in the wall as well as what is behind or under the material being drilled*

19. What three components determine the seriousness of a toxic hazard? *Nature of the compound, concentration in the air and the degree of exposure*

20. What is the most common type of exposure to harmful contaminants in the air? *Inhalation exposure*

21. What are some steps that can be taken to reduce exposure to air contaminants? *Substitute non-toxic materials for toxic ones, provide local exhaust ventilation, and use PPE*

22. What is one example of a situation where an employee may be required to work in an unsafe ambient temperature? *Working on pipes or ducts in a furnace room*

23. What are the three main signs of heat exhaustion? *Low pulse rate, pale skin, below normal temperature*

24. Why are salt tablets given to workers in a high ambient environment? *Replenish salt lost due to perspiration*

25. How does poor ventilation affect a worker? *Decreased alertness, decreased feeling of well being, and accelerated work fatigue*

26. What are some of the effects of poor illumination in a work area? *Eye strain, headaches, and eventually decreased vision*

27. What is noise? *Any loud or disagreeable sound*

28. At what decibel level may hearing be affected? *85db*

29. What are some of the most common types of hearing protection? *Ear plugs, ear muff type*

30. What physical agents can cause skin irritants? *Heat, cold, moisture, and radiation*

31. What does the term “volatile” indicate on a liquid? *Vaporizes easily and mixes with the air to form an explosive vapor*
32. What precautions should be taken while working with all solvents? 1. Avoid skin contact 2. Use available PPE and equipment 3. Wear protection for hands, eyes, and face 4. Do not use near heat or open flame 5. Do not smoke or light matches near 6. Clean up spills immediately 7. In confined area, use a respirator or provide ventilation 8. Obtain medical assistance for anyone suffering ill effects or skin irritation

33. When is it especially important to use “lockout/Tagout” on equipment? Guarded parts are exposed for servicing

34. Is it considered good practice to trade locks with another tradesperson? No

35. When are the old locks to be removed from equipment during shift changes? After the new ones are snapped on

36. What precautions should be taken before entering a tank or boiler? Check for potential hazards, never work alone, wear a harness and line

37. What types of clothing should not be worn while working in a tank? Nylon or wool

38. What is the maximum depth for a trench before shoring, braces, or a cage are required? 4 feet

39. What are two methods of ensuring safe working conditions in chambers that may not contain enough oxygen? Force fresh air in or wear a fresh-air mask

40. What is the purpose of toe-boards on a scaffold? Keep tools and materials from falling off the edge

41. How many rungs at the top of a ladder cannot be used for standing? Three

42. What is the ratio for a ladder height to distance from the wall? 1/4

43. What type of ladder should be used for electrical work? Non-conductive

44. What is the strength factor for a scaffold or work platform? Four times the expected weight

45. What are the four classes of fires? Explain each. Class A – Ordinary combustibles (wood, etc) Class B – Flammable liquids Class C – Electrical equipment Class D – Combustible metals

46. What are some electrical safety precautions? 1. Consider all circuits energized until certain they are not 2. Check for wet areas, energized circuits, and grounded
pipes, etc. 3. No jewelry while working on live electrical equipment 4. No metal tools or ladders around live circuits