

**LOS ANGELES UNIFIED SCHOOL DISTRICT
DIVISION OF ADULT AND CAREER EDUCATION
SAFETY TEST FOR ELECTRICIAN PROGRAM**

School: _____ Industry Sector: Energy, Environment & Utilities

Class: _____ Date: _____

Teacher: _____ Room: _____
(Please Print)

Your Name: _____ Phone: _____
(Last) (First)

Date of Birth: _____ Age: _____ Email: _____

Address: _____
(Street) (City) (Zip)

In Case of Accident, Notify: _____ Phone: _____

To the Student:

These instructions are an important part of training in the Electrician program. All members of the class must observe safety rules and precautions. Habits of carelessness or of failure to follow these rules are sufficient cause for dismissal from the class.

All students are required to learn these safety rules as part of the Electrician program. Additional specific safety instructions are taught in the classroom about the various operation of machines and other workplace equipment.

All students will be required to pass this safety examination with 100% accuracy and to sign the back page of this examination indicating that you have received these instructions.

This test must be on file in the school records for 5 years.

Directions: Mark "T" for true if the following statements are completely true or "F" for false if any part of the statement is untrue. The first statement will serve as an example:

- | | |
|--|----------|
| 0. Most accidents in the classroom are due to unsafe acts by people. | T |
| 1. All classroom injuries and accidents must be reported to the teacher immediately. | _____ |
| 2. The school elevator may be used during an emergency such as fire or earthquake. | _____ |
| 3. It is permissible to store heavy items on top of file cabinets and bookcases as long as nothing is stored within 18" of the sprinkler system. | _____ |
| 4. Objects or materials must be passed carefully to or at another student. | _____ |
| 5. You may lift or carry heavy boxes or equipment in school less than 25 lbs. using proper lifting techniques. | _____ |
| 6. Any frayed cord or even the slightest shock or spark from electrical wire or connections must be reported to the instructor immediately. | _____ |
| 7. When broken tools or an unsafe classroom condition are found, or a machine needs repair, it is permissible to make the needed repair and then report the condition to the instructor. | _____ |
| 8. Smoking on school campus is a violation of District rules and the Health Code. | _____ |

- 9. Hands must be dry when handling any electrical equipment. _____
- 10. All four legs/wheels of the chair must be on the floor. Tilting back can cause the loss of balance. _____

Directions: Complete the following statements by writing the appropriate word or words in the blank spaces in the right margin only.

“THINK SAFETY”/TRUE OR FALSE

- 11. You are permitted to work on any equipment or machinery at any time without instructor present. _____
- 12. If in doubt about any machine, check with the instructor. _____
- 13. One person should carry long pieces of material carefully. _____
- 14. Aisles and working areas must be kept clear of debris. _____
- 15. Pass sharp-edged tools blade first to another student. _____
- 16. Two hardened surfaces should not be struck together. _____
- 17. Sharp hand tools should be carried in your pocket. _____
- 18. Fuses must be pulled with power on. _____
- 19. Disconnect switches should never be by-passed. _____
- 20. Cords should not be used that have defective plugs or worn insulation. _____
- 21. Battery solution burns skin and clothing because it contains acid. _____
- 22. Keep all tools off the tops of batteries. _____
- 23. Always connect or disconnect a battery while a charger is on. _____
- 24. Do not operate the drill with moist hands. _____
- 25. When tightening the drill chuck, make certain the drill is not accidentally turned on. _____
- 26. When using heavy drills, brace the body well and hold the drill with both hands. _____
- 27. To prevent work from being torn from your grasp, work should be securely clamped to the table or held in a vise. _____
- 28. When the drill begins to break through the work, you should increase the pressure. _____
- 29. Chips should be removed from the drill press table by hand. _____
- 30. When testing batteries, use proper PPE and keep your face at a safe distance. _____
- 31. Do not inhale fumes of fluxes or cleaners. _____

Directions: Choose the best answer from the (a), (b), (c), or (d) choices to complete each statement. Write the letter of your choice on the line provided in the right margin.

- 32. A fall protection system must be in place for all work done at heights in excess of:
 - a. 4 feet
 - b. 6 feet
 - c. 8 feet
 - d. 10 feet

33. Electrical currents as low as ____ mA can paralyze muscles and cause a worker to fall when working at heights.
- a. 10 mA
 - b. 30 mA
 - c. 50 mA
 - d. 75 mA
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34. Electrical currents as low as ____ mA can cause a rapid irregular heartbeat and lead to death in a few minutes.
- a. 10 mA
 - b. 30 mA
 - c. 50 mA
 - d. 75 mA
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35. Lockout and tagging is used to:
- a. Prevent unknowing individuals from energizing electrical circuits while they are being serviced or maintained.
 - b. Disable a PV system from being interconnected to the utility grid until inspections have been passed.
 - c. Identify and isolate defective components in an electrical system until service can be performed.
 - d. Identify hazards that must be removed prior to energizing equipment.
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36. OSHA requires that fall protection be used for walkways and ramps, holes and excavations, roofs, and wall openings. Where a worker can fall ____ feet or more.
- a. 4
 - b. 6
 - c. 8
 - d. 10
-
37. Guardrails used to protect open-sided floors and platforms must have top rails ____ tall, a mid-rail and toe boards.
- a. Between 36 and 42 inches
 - b. Between 36 and 45 inches
 - c. Between 39 and 45 inches
 - d. Exactly 42 inches
-
38. Toe boards on guardrail systems must be ____ high:
- a. 3 inches
 - b. 3 ½ inches
 - c. 4 inches
 - d. 4 ½ inches
-

39. Handrails must be capable of withstanding a force of _____ pounds.
- a. 150
 - b. 200
 - c. 250
 - d. 300
40. A 24-foot extension ladder is used to access an upper landing 20 feet off the ground. How far should the base of the ladder be positioned back from the point the ladder makes contact with the upper landing?
- a. 4 feet
 - b. 5 feet
 - c. 6 feet
 - d. 8 feet
41. What is the minimum length of a ladder required to access a roof surface 12 feet off the ground?
- a. 12.3 feet
 - b. 15.4 feet
 - c. 17.2 feet
 - d. 20 feet
42. Ladders used where the employee or ladder could contact exposed energized electrical equipment must have:
- a. Electrical rating
 - b. Grounding means
 - c. Insulated rungs
 - d. Non-conductive side rails
43. What class of hardhat offers the maximum head protection from impacts and electrical shock?
- a. Class A
 - b. Class III
 - c. Class B
 - d. Class C
44. Employee responsibilities for PPE include which of the following?
- a. Assessing the work place for hazards.
 - b. Determining when to use PPE.
 - c. Providing PPE gear.
 - d. Using PPE in accordance with training instructions.

45. What PPE would be most important when operating a power drill?
- Ear plugs
 - Gloves
 - Goggles
 - Shoes
46. If no specific fall protection system is in place, according to OSHA, it is acceptable to provide fall protection by using a person competent in recognition of fall hazards who:
- Monitors the operation on closed circuit TV and is in contact with the crew by walkie-talkie.
 - Is part of the work crew who is capable of warning other workers.
 - Is not part of the work crew, but who is stationed at the level of the work crew within sight of and speaking distance of the crew, who is capable of warning other workers.
 - Provides safety instructions to the crew before the crew begins work
47. Before working with any machines, equipment, or power tools in the shop, you must:
- Pass a safety test and be sure there's an instructor in the shop
 - Learn how to turn on the machines
 - Check each machine by turning it on for a short time
 - Have prior experience on the machine, equipment, or tool
48. When there is even the slightest accident, injury, or illness in the shop, you should first:
- Tell your instructor
 - Get the first aid kit and use it
 - Get the injured person to the nurse
 - Put a Band-Aid on the injury and continue working
49. Whenever you find broken tools, an unsafe shop condition, or a machine in need of repair, you should first:
- Make the needed repair at once
 - Use the tool, complete the repair and then report the broken tool
 - Report the condition to your instructor
 - Warn your classmates to be careful
50. Since loose clothing, ties, dangling jewelry and long hair could get caught in moving parts or machines, you should:
- Get another student to help you
 - Get your hair cut before using machinery
 - Stay away from such machinery
 - Wear properly fitting clothes and tuck in all loose ends before working on a project

51. To protect your feet from falling objects, spilled acid, or objects on the floor of the shop, you should wear:
 - a. Sneakers
 - b. Sandals
 - c. Solid shoes with full tops, preferably with rubber soles and heels
 - d. Shoes with full tops and oil resistant soles

52. When lifting heavy objects, keep your back and head as straight as possible, and use your:
 - a. Arm muscles
 - b. Back muscles
 - c. Leg muscles
 - d. Stomach muscles

53. Lifting heavy objects and carrying long pieces should be done by:
 - a. More than one person
 - b. Someone else
 - c. Knocking obstacles out of your way
 - d. All the above

54. In case a fire begins in the shop, you should first:
 - a. Know where fire extinguishers are and how to use them
 - b. Report the fire and follow only your instructor's directions
 - c. Know how to turn off the power machinery
 - d. All the above

55. Spilled liquids on the floor should be cleaned up to prevent:
 - a. Fire
 - b. Slips and falls
 - c. Both a and b
 - d. Neither a nor b

56. When working with an A frame ladder:
 - a. It is acceptable to stand on the top step
 - b. It is acceptable for two people to work on the ladder at the same time
 - c. It is acceptable for one leg to be broken or uneven
 - d. Do not stand on the top two steps as you may lose your balance

57. Extension ladders:
 - a. Should be carried by at least two people
 - b. Can be used for scaffolding planks
 - c. Should not exceed the specified load limit
 - d. A and C

58. When working on or around electrical items, use a:
 - a. Wood ladder
 - b. Metal ladder
 - c. Fiberglass ladder
 - d. All the above
59. The top of an extension ladder must extend above the roof or platform at least:
 - a. 36"
 - b. 6"
 - c. Two feet
 - d. 12"
60. When working around ladders, it is important to:
 - a. Wear a hard hat
 - b. Wear safety goggles
 - c. Never work under a ladder if someone is on the ladder
 - d. Have someone hold the ladder for you while you are on it
61. Never carry sharp-edged tools in your pocket or with the point toward your body because:
 - a. You'll get hurt if you slip and bump against them
 - b. They will ruin your clothes
 - c. You'll forget where you left them
 - d. Someone else might be injured
62. When you work with a screwdriver:
 - a. Be sure the tip is not worn, chipped, or broken
 - b. Hold your work in the palm of your hand
 - c. Use any sized tip since it will probably do the job
 - d. Keep both hands on the screwdriver
63. When operating power machinery, the first thing to do in an emergency is to:
 - a. Turn the power off
 - b. Finish the job and then report the trouble
 - c. Get away from the machine fast
 - d. Notify your instructor
64. The power must be off when you are oiling, cleaning, or adjusting any power equipment to:
 - a. Save electricity
 - b. Keep your attention on your work
 - c. Prevent catching your hands or clothing in moving parts
 - d. None of the above
65. Before you start a power machine, be sure that you:
 - a. Get your instructor's instructions and permission
 - b. Keep your attention on your work
 - c. Prevent catching your hands or clothing in moving parts
 - d. None of the above

- 66. When a student is using power tools:
 - a. Do not in any way distract the operator of the tool
 - b. Start and stop the machine to help the operator
 - c. Make sure the operator stands in front of the blade
 - d. Let the blade continue to run after the work is finished
- 67. When drilling a small piece of material:
 - a. Hold it in your lap
 - b. Never hold it in your hand
 - c. Use extra pressure
 - d. Use pliers to hold the material
- 68. Use the proper _____ for the material you are cutting.
 - a. blade
 - b. device
 - c. stance
 - d. clothing

Student	Instructor
<p>THIS IS TO CERTIFY that I have received instructions on safety precautions in my Electrician class.</p> <p>The teacher demonstrated to me how to use tools, equipment and chemicals safely and correctly. I will observe all safety precautions. If ever in doubt regarding any operations, I will obtain the necessary information from my teacher.</p>	<p>THIS IS TO CERTIFY that</p> <p>_____</p> <p style="text-align: center;">(name of student)</p> <p>has been given safety instructions in my class.</p> <p>I demonstrated the proper use of tools, equipment and chemicals in the class and this student passed this written safety test with 100% accuracy.</p>
<p>_____</p> <p style="text-align: center;">(Student Signature)</p>	<p>_____</p> <p style="text-align: center;">(Teacher Signature)</p>
<p>_____</p> <p style="text-align: center;">(Date)</p>	<p>_____</p> <p style="text-align: center;">(Date)</p>