

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

School: _____ Industry Sector: Transportation

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 Auto Mechanics 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 Auto Mechanics 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: 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.

“THINK SAFETY”/REPORT TO YOUR INSTRUCTOR

11. Most accidents in the shop are due to:
 - a. Unguarded equipment
 - b. Unsafe shop conditions
 - c. Unsafe acts by people
 - d. All the above
12. Before working with any machines, equipment, or power tools in the shop, you must:
 - a. Pass a safety test and be sure there’s an instructor in the shop
 - b. Learn how to turn on the machines
 - c. Check each machine by turning it on for a short time
 - d. All the above
13. When there is even the slightest accident, injury, or illness in the shop, you should first:
 - a. Tell your instructor
 - b. Get the first aid kit and use it
 - c. Get the injured person to the nurse
 - d. Put a Band-Aid on the injury and continue working
14. Whenever you find broken tools, an unsafe shop condition, or a machine in need of repair, you should first:
 - a. Make the needed repair at once
 - b. Use the tool, complete the repair and then report the broken tool
 - c. Report the condition to your instructor
 - d. Warn your classmates to be careful
15. Before test-running an engine or using any power machinery, be sure to:
 - a. See that all safety guards are removed
 - b. Get your instructor’s permission
 - c. Both a and b
 - d. Neither a nor b

WEAR PROTECTIVE CLOTHING

16. California law states that “Eye protective devices (approved safety goggles or a face shield) shall be worn anytime you are in the shop and especially while:
 - a. Working under a car
 - b. Repairing or servicing any vehicle or other machinery or equipment
 - c. Using power machinery
 - d. All the above

TRUE OR FALSE

17. Since loose clothing, ties, dangling jewelry and long hair could get caught in moving parts or machines you should wear properly fitting clothes and tuck in all loose ends and hair before working on a machine or project.
18. To protect your feet from falling objects, spilled acid, or objects on the floor of the shop you should wear shoes with full tops and oil resistant sole.

LIFTING AND CARRYING SAFETY

19. 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
20. 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

PREVENT FIRE AND BURNS

21. 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 main power machinery shut-off switch
 - d. All the above
22. Gasoline should never be used:
 - a. For cleaning
 - b. Near sparks or flames
 - c. To pour into the carburetor intake to start the car
 - d. All the above

TRUE OR FALSE

- 23. To prevent hand and arm burns, never use your hand as a choke when the engine is cranking or running, nor remove a hot radiator cap with your bare hands.
- 24. Materials or fluids that are flammable or combustible should never be used near sparks or flames. If you do not know whether or not a material is combustible, you should read the label on the container or ask your instructor.

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.

- 25. Liquids or grease spilled 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
- 26. To prevent fire before you leave the area, put all rags containing oil, gasoline, paint, solvents, or other similar flammable materials:
 - a. In covered metal containers
 - b. Under the nearest bench
 - c. In your pocket
 - d. In your Locker

TRUE OR FALSE

- 27. If battery acid splashes in your skin or clothing, you should first rinse it off with plenty of water at the eye wash station and report to your instructor.

HAND TOOLS AND BENCH WORK

- 28. Using the tool of the right size, shape, and recommended “work load” for the job is important. Do not just pick up any available tool to “get by” because:
 - a. The wrong tool can slip and hurt you
 - b. Over-loading a tool can cause breakage and injury
 - c. Both a and b
 - d. It is permissible to use any available tool
- 29. Never use chisels, hammers, pinches, or any tools with:
 - a. Round heads
 - b. Mushroomed heads
 - c. Flat heads
 - d. Square heads

30. Which is a good safety practice when working with hand tools?
- Giving tools to another person by the handles first
 - Cleaning off greasy handles so they aren't slippery
 - Both a and b
 - Neither a nor b
31. Be sure sharp-edged tools are kept sharp because:
- A dull tool can slip over the work and injure you
 - A dull tool needs more pressure and is harder to control, and thus it is more dangerous
 - Both a and b
 - Neither a nor b

TRUE OR FALSE

32. After making sure your hammer, screwdriver, or file is the right size, type, and sharpness, etc., the next most important thing to check for is a type fitting handle.

SHOP PRACTICE

33. Floors and aisles should be kept clear. Hoses, cords, creepers, and jacks must be kept out of the passageways to prevent:
- Slips and falls
 - A messy looking shop
 - Injuries
 - All the above

TRUE OR FALSE

34. The large shop doors should be kept open when engines are running because good air circulation is needed to protect against carbon monoxide gas poisoning
35. Disconnect battery cables before doing engine work to:
- Prevent short circuits or sparks
 - Save power
 - Save the life of the battery
 - To prevent the possibility of reverse polarity
36. When the vehicle is elevated on the lift the door on the vehicle should be:
- Opened
 - Closed
 - Locked
 - Left ajar

37. The transmission should be in park or neutral and the hand brake set before starting an engine because:
- This will prevent the car from moving unexpectedly
 - The car will not start unless this is done
 - It saves gas
 - It prevents transmission leaks
38. To prevent injury to eyes or ear drums from flying particles, an air hose should never be:
- Pointed towards yourself or others
 - Used to clean dust from your clothing
 - Both a and b
 - Neither a nor b

OPERATE POWER MACHINERY SAFELY

39. In case of an emergency when you are operating power machinery, always be ready first to:
- Turn the power off
 - Get away from the machine fast
 - Notify your instructor
 - All the above
40. Before leaving a power machine, be sure that:
- All parts have stopped moving
 - The power has been turned off
 - Both a and b
 - Neither a nor b
41. The main power must be off when you are oiling, cleaning, or adjusting any power equipment to:
- Save electricity
 - Keep your attention on your work
 - Prevent catching your hands or clothing in moving parts
 - None of the above
42. Before you start a power machine, be sure that you:
- Get your instructor's instructions and permission
 - Check to make sure that guards and safety devices are in place and adjustments are tightly locked
 - Both a and b
 - Neither a nor b

43. Before you turn on the power to start a machine, be sure:
- Any loose tools or other objects are removed from the machine
 - You are not standing where you could be injured by material thrown by the machine
 - To check with the instructor
 - All the above

PORTABLE ELECTRIC TOOLS

44. To avoid injury from the chuck key or the rotating drill, be sure:
- The drill will not be accidentally turned on while you are tightening the chuck
 - The switch is on before plugging the drill into the wall outlet
 - The switch is off before plugging into the outlet
 - Both a and c
45. Extension cords should be:
- Red in color
 - Draped across aisles
 - Checked for worn insulation
 - Yanked out of the outlet when finished
46. When using power equipment, be sure your hands and feet are dry because wet hands and feet invite:
- Shocks
 - Blisters
 - Dirt
 - None of the above
47. While drilling with the electric drill:
- Brace yourself well and be ready to release the switch in case the drill grabs
 - Keep your face away from the drill
 - Both a and b
 - Neither a nor b
48. When drilling a small piece of metal
- Hold it in your lap
 - Never hold it in your hand
 - Use extra pressure
 - Use pliers to hold the material

PEDESTAL GRINDER

49. To prevent the work from catching between the rest and the grinding wheel, the gap between them should be greater than:
 - a. 1 inch
 - b. $\frac{1}{4}$ inch
 - c. $\frac{1}{8}$ inch
 - d. $\frac{1}{2}$ inch
50. Before starting the grinder, be sure that:
 - a. The side wheel guards are removed
 - b. The grinding wheel is securely in place
 - c. Both a and b
 - d. Neither a nor b
51. To prevent the work from slipping into the grinding wheel:
 - a. Hold it with a rag
 - b. Hold it with vise grips or a vice
 - c. Hold it with pliers
 - d. Hold it with gloves
52. To avoid injury from flying particles:
 - a. Always wear safety goggles or a face shield
 - b. Grind on the sides of the wheel only
 - c. Stand in front of the wheel when starting the grinder
 - d. The tool rest should be $\frac{1}{4}$ " from the wheel
53. To prevent the grinder from throwing the work
 - a. Grind above the center of the wheel
 - b. Grind below the center of the wheel
 - c. Push the work downward between the wheel and the rest
 - d. Grind on the side of the wheel

DRILL PRESS

54. To prevent the work from being torn from your grasp, work should be securely clamped to the table or in a:
 - a. Wrench
 - b. Vise
 - c. Vertical position
 - d. Horizontal position
55. The vise should be held firmly to prevent the work:
 - a. Overheating
 - b. Falling
 - c. Revolving in a dangerous manner
 - d. All the above

56. When the drill begins to cut through the work, ease up on the:
- Chuck
 - Feed pressure
 - Vise
 - Drill speed
57. An improperly ground drill can cause the drill to:
- Dig into the work
 - Throw the work
 - Both a and b
 - Neither a nor b
58. Before the power is turned on, the drill chuck key must be:
- Removed from the chuck
 - Installed correctly
 - Adjusted
 - Lubricated
59. The machine should be stopped before removing work, chips, or cuttings. Chips and cuttings should then be removed from the table with:
- An air gun
 - Your hand
 - A brush
 - A shop towel

AXLE STANDS AND JACKS

60. Before lifting a car with a hydraulic jack, first be certain that:
- The car's transmission is in neutral
 - Your instructor has checked the job and the equipment that you are using
 - The rest on top of the jack is in proper position
 - All the above
61. When one end of a car is lifted, blocks should be used:
- At the lifting end before jacking
 - At the opposite end after jacking
 - Where and how the instructor tells you, according to the type of equipment that you are using
 - At the opposite end of the vehicle before jacking
62. Be sure the jack is correctly positioned under a strong section of the car, especially if:
- It is a station wagon
 - There is extra weight in the trunk
 - The car has a unit body construction
 - It is a 4-wheel drive

63. If the jack is used under an axle, make sure that:
- The vehicle's transmission is in neutral
 - The lifting pad is positioned correctly to prevent slipping
 - Both a and b
 - Neither a nor b
64. You should never:
- Crawl under a car supported only by a jack
 - Keep the hydraulic valve closed after raising the car
 - Leave the jack handle pointing straight up
 - Torque the lug nuts
65. When using a pair of axle stands, check to be sure that they:
- Are the same height
 - Are the same brand
 - Have proper school identification numbers
 - Are the same size
66. When lowering a car on a hydraulic jack, you should:
- Lower it slowly
 - Remove the wheel blocks before releasing the jack
 - Keep the hydraulic valve closed
 - Lower the car rapidly

ARBOR AND HYDRAULIC PRESSES

67. The operator must make sure that the work is solidly supported on the press table and that the work is lined up correctly to prevent dangerous:
- Cranking
 - Pressure
 - Slipping
 - All the above
68. After each press table adjustment, make sure the supporting pins are properly placed so that the work set-up will not:
- Puncture
 - Collapse
 - Build up pressure
 - Align
69. A bad hand injury could occur if the work should slip while you are holding onto the work or onto the:
- Pressure ram
 - Arbor
 - Handle
 - Cable

70. You must watch the pressure gauge on a hydraulic press very carefully when the ram comes in contact with the work because:
- Little effort by the operator can result in damage
 - The Hydraulic press multiplies handle pressure greatly, compared with that of the arbor press
 - Both a and b
 - Neither a nor b

Student	Instructor
<p>THIS IS TO CERTIFY that I have received instructions on safety precautions in my Auto Mechanics class.</p>	<p>THIS IS TO CERTIFY that</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>_____</p> <p style="text-align: center;">(name of student)</p>
<p>_____</p> <p style="text-align: center;">(Student Signature)</p>	<p>has been given safety instructions in my class.</p>
<p>_____</p> <p style="text-align: center;">(Date)</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;">(Teacher Signature)</p>	<p>_____</p> <p style="text-align: center;">(Date)</p>