

LOS ANGELES UNIFIED SCHOOL DISTRICT
DIVISION OF ADULT AND CAREER EDUCATION

SCHOOL: _____

AREA: _____

SAFETY TEST FOR INDUSTRIAL EDUCATION
CONSTRUCTION

Name of Student: _____

Date: _____

Address: _____

Phone: _____

In Case of Accident, Notify:

Name: _____

Address: _____

Phone: _____

Date Enrolled: _____

Date of Birth: _____

INTRODUCTION

This general safety test is designed to prepare trainees for initial construction employment training. The test does not include questions on all machines and equipment used in different construction work areas. Safety instructions and tests on such specialty equipment must be given when the student begins more specialized training. Students are not required to answer questions on machines or equipment, which are not located in the shop or which are not utilized in the industrial program.

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

DIRECTIONS:

Choose the best answer from the (a), (b), (c), or (d) choices to complete each statement. Write the letter of your choice in the parentheses () to the left of each item number.

"THINK SAFETY"/REPORT TO YOUR INSTRUCTOR

- 1) () Most accidents in the shop are due to:
 - a) Unguarded equipment
 - b) Unsafe shop conditions
 - c) Unsafe acts by people
 - d) Following safety procedures

- 2) () 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) Have prior experience on the machine, equipment, or tool

- 3) () 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

- 4) () 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

WEAR PROTECTIVE CLOTHING

- 5) () Since loose clothing, ties, dangling jewelry and long hair could get caught in moving parts or machines you should:
 - a) Get another student to help you
 - b) Get your hair cut before using machinery
 - c) Stay away from such machinery
 - d) Wear properly fitting clothes and tuck in all loose ends before working on a project

- 6) () 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

LIFTING AND CARRYING SAFETY

- 7) () 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
- 8) () 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 of the above

SHOP SAFETY GUIDELINES

- 9) () Floors and aisles should be kept clear. Hoses, cords, tools, and jacks must be kept out of passageways to prevent:
- a) Slips and falls
 - b) A messy-looking shop
 - c) A bad rating by the inspectors
 - d) Injuries
- 10) () To prevent injury to eyes or ear drums from flying particles, an air hose should never be:
- a) Pointed toward yourself or others
 - b) Used to clean dust from your clothing
 - c) Both a and b
 - d) Neither a nor b

PREVENT FIRE AND BURNS

- 11)() 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 of the above
- 12)() 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:
- a) Read the label on the container or ask the teacher
 - b) Light a match to a small sample of the material or fluid to find out
 - c) Ask a more experienced person
 - d) All of the above

- 13)() Paint, plaster, dry wall mud, or varnish 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
- 14)() Before you leave the area, put all rags containing varnish, paint, solvents, or other similar flammable materials:
- a) In covered material containers
 - b) Under the nearest bench
 - c) In your pocket
 - d) In your locker

LADDER SAFETY

- 15) () When Moving a ladder be sure that:
- a) It is closed
 - b) There are no tools or materials left on top of the ladder
 - c) Be aware of electrical lines
 - d) All of the above
- 16) () 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
- 17) () Long 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
- 18) () When working with A frame step ladders:
- a) All legs must be secure
 - b) It must be fully opened and locked
 - c) Do not climb on the back side of the ladder
 - d) All of the above
- 19) () When working on or around electrical items use a:
- a) Wood ladder
 - b) Metal ladder
 - c) Fiberglass ladder
 - d) Either a or c

- 20) (___) The top of an extension ladder must extend above the roof or platform at least:
- a) 30"
 - b) 6"
 - c) Two feet
 - d) 12"
- 21) (___) 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
- 22) (___) When placing an extension ladder against the wall, the recommended distance from the base of the ladder to the wall is:
- a) 1/4 the height
 - b) 1/3 the height
 - c) 1/2 the distance
 - d) equal distance
- 23) (___) When climbing the ladder:
- a) Use both hands
 - b) Take one step at a time
 - c) Carry tools in tool bags and not your hands
 - d) All of the above
- 24) (___) Do not lean ladders against:
- a) Windows
 - b) Doors
 - c) Moveable objects
 - d) All of the above

HAND TOOLS AND BENCH WORK

- 25) (___) 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
- 26) (___) Never use chisels, hammers, punches, or any tools with:
- a) Round heads
 - b) Mushroomed heads
 - c) Flat heads
 - d) Square heads

- 27) (___) Which is a good safety practice when working with hand tools?
- a) Giving tools to another person by the handles first
 - b) Cleaning off greasy handles so they aren't slippery
 - c) Both a and b
 - d) Neither a nor b
- 28) (___) 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
- 29) (___) Be sure sharp-edged tools are kept sharp because:
- a) A dull tool can slip over the work and injure you
 - b) A dull tool needs more pressure and is harder to control, and thus it is more dangerous
 - c) Both a and b
 - d) Neither a nor b
- 30) (___) After making sure your hammer, screwdriver, or file is right for size, type, and sharpness, etc., the next most important thing to check for is
- a) A tight-fitting handle
 - b) If anyone else needs the tool
 - c) Price
 - d) None of the above
- 31) (___) 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
- 32) (___) When using a shovel with a cracked, split or loose handle the following can occur:
- a) Blister
 - b) Bodily injury
 - c) Broken finger nail
 - d) Bruised ego

- 33) (___) When clamping work never leave a clamp or any other part of your work protruding from the bench because someone could:
- a) Hit themselves with it
 - b) Disturb your work
 - c) Damage your work
 - d) All of the above
- 34) (___) When using the miter box:
- a) Release the catches of the miter box to lower the blade
 - b) Never place your hands under or near the teeth of the saw
 - c) Make sure the blade is sharp
 - d) All of the above

GENERAL POWER TOOL SAFETY

- 35) (___) 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
- 36) (___) Before leaving a power machine, be sure that:
- a) All parts have stopped moving
 - b) The power has been turned off
 - c) Both a and b
 - d) Neither a nor b
- 37) (___) 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
- 38) (___) Before you start a power machine, be sure that you:
- a) Get your instructor's instructions and permission
 - b) Check to make sure that guards and safety devices are in place and adjustments are tightly locked;
 - c) Both a and b
 - d) Neither a nor b

- 39) (___) Before you turn on the power to start a machine, be sure:
- a) Any loose tools or other objects are removed from the machine
 - b) You are not standing where you could be injured by material thrown by the machine
 - c) To check with your instructor
 - d) All of the above
- 40) (___) When using an extension cord:
- a) Route the wires above the work if possible
 - b) Make sure that there are no cuts or nicks in the cord
 - c) Make sure that the grounding prong is intact
 - d) All of the above
- 41) (___) When using power tools make sure that the guard is:
- a) Safely out of the way
 - b) Always in place
 - c) Removed to keep it from binding
 - d) Locked open
- 42) (___) 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 for the operator 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

PORTABLE ELECTRIC TOOLS

- 43) (___) When using any portable electric tool, check the electrical plug at the end of the cord to see that the _____ is not broken.
- a) Ground prong
 - b) Insulation
 - c) Drill bit
 - d) All of the above
- 44) (___) To avoid injury from the chuck key or the rotating drill, be sure:
- a) The drill will not be accidentally turned on while you are tightening the chuck
 - b) The switch is on before plugging the drill into a wall outlet
 - c) The switch is off before plugging into an outlet
 - d) Both a and c
- 45) (___) When using a heavy-duty drill hold the drill motor with both hands to:
- a) Avoid breaking the drill bit
 - b) Avoid drilling an offset hole
 - c) Avoid twisting
 - d) Control the drill angle

- 46) (___) Extension cords should be:
- a) Red in color
 - b) Draped across aisles
 - c) Checked for worn insulation
 - d) Yanked out of the outlet when finished
- 47) (___) When using power equipment, be sure your hands and feet are dry because wet hands and feet invite:
- a) Shocks
 - b) Blisters
 - c) Dirt
 - d) None of the above

Portable Electric Drill

- 48) (___) While drilling with the electric drill:
- a) Brace yourself well and be ready to release the switch in case the drill grabs
 - b) Keep your face away from the drill
 - c) Both a and b
 - d) Neither a nor b
- 49) (___) 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

Bench Grinder

- 50) (___) To prevent the work from catching between the rest and the grinding wheel, the gap between them should not be greater than:
- a) 1 inch
 - b) 1/4th inch
 - c) 1/8th inch
 - d) 1/2 inch
- 51) (___) 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
- 52) (___) To prevent the work from slipping into the grinding wheel:
- a) Hold it with a rag
 - b) Hold it with vise grips or a vise
 - c) Hold it with pliers
 - d) Hold it with gloves

- 53) () 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 1/4" from the wheel
- 54) () 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

Band Saw

- 55) () Make adjustments on the band saw _____:
- a) at any time
 - b) when the saw is shut off and not running
 - c) while the band saw is running
 - d) during the cutting process
- 56) () When using the band saw make _____ cuts when cutting tight curves in your project.
- a) Wavy
 - b) Relief cuts
 - c) Straight cuts
 - d) Diagonal cuts

Jig Saw

- 57) () When using the jig saw feed wood into the blade _____.
- a) Slowly
 - b) Forcefully
 - c) As fast as possible
 - d) By hand
- 58) () The jigsaw is for _____ in wood.
- a) Ripping
 - b) Cutting tight curves
 - c) Cutting dados
 - d) Cutting designs

Circular Saw

- 59) () The saw blade on a skill saw should not extend more than _____ below the surface of the stock being cut.
- a) 1 1/2"
 - b) 1/2"
 - c) 3"
 - d) 1/4"

- 60) (___) Make sure the blade guard on a skill saw is in place and is _____.
- a) Binding tightly
 - b) Up and tight
 - c) Operating freely
 - d) Loosely attached
- 61) (___) The two most important safety features on the skill saw are the _____ and _____.
- a) Ground wire and the guard
 - b) The base and adjusting levers
 - c) The gears and oil bath gear box
 - d) Cord and handle
- 62) (___) When using the skill saw always stand to the side of the project, never in line with the _____.
- a) Handle
 - b) Work pieces
 - c) Blade
 - d) Cord

Reciprocating Saw

- 63) (___) When changing a reciprocating saw blade the cord must be _____.
- a) Plugged in
 - b) Unplugged
 - c) Over your shoulder
 - d) Away from water
- 64) (___) Use the proper _____ for the material you are cutting.
- a) Blade
 - b) Device
 - c) Stance
 - d) Clothing

Radial Arm Saw

- 65) (___) Adjust the overhead arm so the saw will cut ___ inch below the saw table.
- a) $\frac{1}{4}$ "
 - b) $\frac{1}{2}$ "
 - c) 1"
 - d) 2"

- 66) (___) When cross cutting, hold the wood firmly against _____ to prevent the saw from jumping into the wood.
- a) the fence
 - b) the wall
 - c) the blade
 - d) your body

Disk Sander

- 67) (___) When sanding on the side of the disk with a disk sander, sand on the side that is traveling _____.
- a) Sideways
 - b) Downward
 - c) Up
 - d) Backwards
- 68) (___) Use caution when sanding thin pieces of stock with a disc sander so that your fingers do not come in contact with the _____ surface of the disk.
- a) Abrasive
 - b) Smooth
 - c) Soft
 - d) Hard

Planer

- 69) (___) When using a planer do not set the depth of the cutters to cut deeper than _____ of an inch.
- a) $\frac{1}{8}$
 - b) $\frac{1}{4}$
 - c) $\frac{1}{2}$
 - d) $\frac{3}{4}$
- 70) (___) When using a planer do not look at the board that is being planed. Chips, knots or a piece of stock may _____ and hit you in the eye.
- a) Stop
 - b) Fly out
 - c) Fall out
 - d) Drop out

Power Miter Saw

- 71) (___) When cutting on the miter saw do not have your fingers in line with the _____.
- a) Blade
 - b) Fence
 - c) Switch
 - d) Cord

- 72) (___) When using a power miter box do not cut small pieces of wood as they may shatter and _____ from the blade.
- a) Shoot out
 - b) Fall off
 - c) Bind
 - d) Split

Router

- 73) (___) When using a router let the router come up to full operating speed before letting the _____ come in contact with the wood.
- a) Cord
 - b) Motor
 - c) Bit
 - d) Guide
- 74) (___) When plugging in the router make sure the _____ is in the off position.
- a) Bit
 - b) Switch
 - c) Guide
 - d) Guard

Nail Guns

- 75) (___) When using large nail guns do not disconnect the safety _____.
- a) Shoe
 - b) Trip mechanism
 - c) Guard
 - d) Cord
- 76) (___) When using nail guns you must wear _____ protection.
- a) Hand and arm
 - b) Foot and leg
 - c) Hearing and eye
 - d) Nose and mouth
- 77) (___) When using a Brad Nailer disconnect the nail gun from the _____ when not in use.
- a) Compressor
 - b) Power
 - c) Clip
 - d) Guard

- 78) (___) When connecting air pressure to small nail guns point the gun down and away from _____.
- a) The wood
 - b) Yourself
 - c) Walls
 - d) The floor

DRILL PRESS

- 79) (___) 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
- 80) (___) The vise should be held firmly to prevent the work from:
- a) Overheating
 - b) Falling
 - c) Revolving in a dangerous manner
 - d) All of the above
- 81) (___) When the drill begins to cut through the work, ease up on the:
- a) chuck
 - b) feed pressure
 - c) vise
 - d) drill speed
- 82) (___) An improperly sharpened drill bit can cause the drill to:
- a) dig into the work
 - b) throw the work
 - c) both a and b
 - d) Neither a nor b
- 83) (___) Before the power is turned on, the drill chuck key must be:
- a) removed from the chuck
 - b) installed correctly
 - c) adjusted
 - d) lubricated
- 84) (___) The machine should be stopped before removing work, chips, or cuttings. Chips and cuttings should then be removed from the table with:
- a) An air gun
 - b) Your hand
 - c) A brush
 - d) A shop towel

THIS IS TO CERTIFY that I have received instruction on the safety precautions to be observed in a class on construction. I promise to observe these precautions and, if ever in doubt about any operation, that I will obtain the necessary instructions from my teacher.

Student's signature

Witness to student signature

Date

THIS IS TO CERTIFY

Student's name

Has been given instructions on the general safety precautions to be observed in this shop and has satisfactorily passed the written safety test for initial shop training.

Instructor's signature