

EXPLORATORY TECHNOLOGY SAFETY INSTRUCTIONS

1. No machine is to be operated while the teacher is out of the room.
2. You are not required to operate any power driven machinery in the lab in order to earn your credit. You may do the work with hand tools.
3. Before you will be given permission to operate any machine you must: pass a test on these general safety instructions, pass the test on the safe operation of that machine, and be given a demonstration by the teacher.
4. All students must be aware of the fire safety procedures.
5. All flammable liquids must be stored in approved safety cabinets.
6. Only use toxic chemicals in properly ventilated areas.
7. Put all used or oily rags in approved covered metal cans. Oily rags exposed to the air may catch fire.
8. Use of abrasive materials must be done with extreme caution.
9. Compressed air should be used only when necessary and then with extreme caution.
10. You must report all accidents to the teacher at once.
11. Everyone must use approved eye protection whenever anyone is working in the shop.
12. You must have all loose clothing tightly fastened or removed before operating any machine. All rings and loose jewelry must also be removed and hair must be tied back.
13. Particle masks are provided for dusty or toxic atmospheric conditions, such as spray finishing, sanding, sawing, and lathe work.
14. Do not lift heavy objects beyond your strength. Ask the teacher for assistance.
15. Never put or carry nails, screws, or other objects in your mouth.
16. Running, scuffling, pushing another student, and “horseplay” in the lab are not allowed at any time.
17. You must never throw anything in the lab.
18. Any spills must be cleaned up immediately.
19. You must never leave any tools or materials of any kind lying on the floor.
20. Return all tools that you are not using to the proper storage area.
21. Carry tools so that the sharp edges are pointed downward and away from your body.
22. To remove a power cord from an outlet you should pull the plug, not the cord.
23. Make sure all plugs and power cords are not damaged and in proper working order before using any piece of equipment or portable electric tools.
24. If you find a damaged tool, report it to the teacher. Never use it in that condition.

25. If you are shocked while plugging in or using a piece of equipment, stop, do not continue working, and immediately tell the teacher.
26. Do not use any machines, hand tools, or portable electric tools on any unapproved projects.
27. Always stop any machine before leaving it.
28. Shut off any machine which you think is not operating properly and report it to the teacher at once.
29. You must not annoy or distract the attention of anyone operating a machine.
30. You must keep all safety guards in place while the machine is running.
31. All cleaning, oiling, and adjusting of any machine must be done only when the machine is at a dead stop.
32. Be sure all movable machine parts are tightly secured and the work area is cleaned before the power is turned on.
33. All tools must be removed from a machine before the power is turned on.
34. All special set-ups must be inspected and approved by the teacher before the machine is turned on and used.
35. When you are through using a special set-up, remove attachments and adjust the machine for normal use.
36. Clean off all machines when you are through using them, putting scraps in the proper place, not on the floor.
37. Never use a file unless it is equipped with a handle. The sharp end of the tang may cut your hand or wrist.
38. You should never strike a file against a hard surface. Clean it with a file card.
39. Do not use tools with mushroomed ends; these sharp edges could cut and/or become an eye hazard.
40. Do not use a hammer with a loose head.
41. Never strike two hammer faces or two hardened surfaces together. Metal pieces could fly and cause an injury.
42. Never turn on a machine unless you are going to use it.
43. You must never start or stop a machine for another person.
44. Make all measurements on your work while the machine is at a dead stop.
45. Do not stand near or lean on any machine that is in motion.
46. Stand to one side, away from the blade path, when turning on any machine and do not move into the operator's position until you are sure that the machine is working properly.
47. Long pieces of material should be carried by having a student at each end.
48. Unplug all portable electric hand tools before any adjustments are made.

49. Always stand on the floor, not on a bench, stool, or chair when working on any piece of material.
50. Observe minimum recommended material sizes for each machine.
51. When you are skiving leather, or when you are whittling with a knife or carving with a chisel, be sure to cut away from any part of your body.
52. When working with glass or mirrors, treat all edges as if they are dangerous until they have been ground and polished.
53. You should always use gloves when handling hot materials.
54. If you should spill or splash any acid on yourself, be sure to immediately wash it off with lots of cold water, then report it to the teacher.
55. You should always keep a lit soldering torch in your hands or on a bench hanger to avoid burning yourself or others.
56. Never open or operate a piece of equipment or tool without the instructor's approval.
57. Do not try to hold in your hand or on your lap any stock that you are working on with a knife or chisel.

The first person to reach an electrically-shocked individual should first call for help or have someone go for help. Turn off the power source if possible. Do not touch the individual – wait for the instructor or another adult. If there is not an adult present, remove the victim from contact with the power by using an insulated material such as a dry board, rope, or leather belt (watch for metal buckle) to push/pull the power source off and/or away from the victim. Do not use your bare hands or anything damp or wet.

Do not hesitate to ask questions or ask your teacher for help if you do not understand how a machine operates or are not sure of the operational safety rules of any machine.