

Physics Safety Rules and Regulations

1. Listen to ALL instructions given by your teacher and follow them carefully.
2. Read your lab assignments before coming to class. Prepare your pre-lab write-up prior to entering the lab.
3. Perform only those experiments on which you have been instructed. Do not touch equipment until instructed.
4. Your behavior and attitude in lab should be excellent. Both your safety and the safety of others depend on it.
5. It is your responsibility to take care of lab equipment, use it only as instructed, and report any damages to your teacher.
6. Reread lab instructions step-by-step as you perform the lab. If you are in doubt about any procedure, ask your teacher (after your lab group has discussed the problem).
7. Clean and dry your lab work area at the close of the lab period. Return all equipment and materials to the proper place.
8. Wash your hands after each lab experiment that involves chemicals.
9. Tie back long hair to prevent injury. Long hair could catch on fire around an open flame, could block your view or the view of your lab partner, or could become caught in the equipment.
10. Be careful when operating electrical equipment. The lab working surface, equipment, and your hands should be dry. Check all cords and plugs to be sure they are in good condition. Look for exposed or broken wires and insulation in poor condition. Do not grab wires to unplug equipment. Use the plug to disconnect equipment from the socket.
11. When you are working with an open flame or heating materials, never leave them unattended. Hot plates remain hot for several minutes after they are turned off. Never touch the surface of a hot plate.
12. Lasers should never be pointed into the eyes of another person. Never look directly into the oncoming beam as this might cause eye damage.

SAFETY EQUIPMENT

13. Safety goggles are provided for each and every student. They can be the most important piece of safety equipment you use. They are vital to the safety of your vision and will protect your eyes only when used properly. Wear safety goggles when working with heat, projectiles, chemicals, with any type of grinding, cutting, soldering, or when instructed to do so by your teacher.
14. Eyewash stations are provided in each lab. The eye wash is used to flood the eyes with water to remove foreign materials and to dilute a harmful chemical. The eye should be irrigated continuously for 20 minutes.
15. Fire blankets are heavy wool blankets provided in all labs. They are used to smother a fire. Fire blankets may be used to wrap around an individual, smother a table surface fire, or smother a fire in a wastebasket.

16. Fire extinguishers are found in all areas. These are used to put out small fires. Water should NOT be used to put out an oil or grease fire. For this type of fire, you should use a fire extinguisher that contains carbon dioxide, foam, or some type of dry chemicals. When in doubt as to the nature of the fire, do not use water — use a fire extinguisher instead. In the case of a major fire, sound the alarm and evacuate the building using fire drill procedures.
17. Safety charts are provided in all lab areas. It is important to read these. They will remind you of the important lab procedures and safety precautions.
18. Know the location of the MSDS file in your building. Know what information is contained on a material safety data sheet.

FIRST AID

19. Notify your instructor of any accident regardless of how minor. If you are injured, notify your teacher first to receive immediate first aid and proceed to the nurse if necessary.
20. If any corrosive chemical is spilled or splashed on your skin or in your eyes, flood with water immediately and notify your instructor. Flooding of the eye should continue for 20 minutes.
21. If you burn yourself in the lab you should immediately immerse the burned area in cold water, then tell your teacher (assuming that the burn is not 2nd or 3rd degree).

RULES FOR WORKING WITH CHEMICALS

22. Whenever you are asked to note the odor of any chemical, carefully waft the fumes toward your nose. Do not inhale any fumes directly.
23. Carefully read the label twice on any bottle prior to using the chemical. Many formulae and chemical names look alike, but confusing them could be dangerous.
24. Never use an open flame near a volatile or flammable liquid.
25. Never taste any chemical in the lab. Not all poisonous materials in the lab are so labeled.
26. When diluting acids, always pour the acid into the water while stirring. Never pour water into concentrated acid because the temperature of the acid will rise faster than that of the water causing splattering.
27. Be cautious of hot glass and hot plates that have recently been heated. These hot items look just like cold ones, but can inflict severe burns. Hot plates can remain hot for several minutes after they have been turned off.
28. Never fill a receptacle with other material than that called for by the label. Label the container before filling.
29. Dispose of waste chemicals as prescribed by your instructor. Do not put any solids, paper or matches into the sink.
30. Take only the amounts of materials that you actually need for an experiment.
31. Return all reagent bottles to their proper location, but never return any excess chemical to a reagent bottle.
32. Handle combustible and radioactive substances only under the supervision of the instructor.