

Safety in the Laboratory



1. Study your lab assignment **before** you come to the lab. If you have any questions, be sure to ask your teacher for help.
2. Do not perform experiments without your teacher's permission. **Never** work alone in the laboratory.
3. Safety goggles and a laboratory apron must be worn whenever you are in the lab. Gloves should be worn whenever you use chemicals that cause irritations or can be absorbed through the skin. Long hair must be tied back.
4. Do not wear contact lenses in the lab, even under goggles. Lenses can absorb vapors and are difficult to remove in case of an emergency.
5. Avoid wearing loose, draping clothing and dangling jewelry. Bare feet and sandals are not permitted in the lab.
6. Eating, drinking, and chewing gum are not allowed in the lab.
7. Know where to find and how to use the fire extinguisher, safety shower, fire blanket, and first-aid kit.
8. Report any accident, injury, incorrect procedure, or damaged equipment to your teacher.
9. If chemicals come in contact with your eyes or skin, flush the area immediately with large quantities of water. Immediately inform your teacher of the nature of the spill.
10. Handle all chemicals carefully. Check the labels of all bottles **before** removing the contents. Read label three times:
 - Before you pick up the container.
 - When the container is in your hand.
 - When you put the bottle back.
11. Do not take reagent bottles to your work area unless instructed to do so. Use test tubes, paper, or beakers to obtain your chemicals. Take only small amounts. It is easier to get more than to dispose of excess.
12. Do not return unused chemicals to the stock bottle.
13. Do not insert droppers into reagent bottles. Pour a small amount of the chemical into a beaker.
14. **Never** taste any chemicals. **Never** draw any chemicals into a pipette with your mouth.
15. Keep combustible materials away from open flames.
16. Handle toxic and combustible gases only under the direction of your teacher. Use the fume hood when such materials are present.
17. When heating a substance in a test tube, be careful not to point the mouth of the test tube at another person or yourself. **Never** look down the mouth of a test tube.
18. Do not heat graduated cylinders, burettes, or pipettes with a laboratory burner.
19. Use caution and proper equipment when handling hot apparatus or glassware. Hot glass looks the same as cool glass.
20. Dispose of broken glass, unused chemicals, and products of reactions only as directed by your teacher.
21. Know the correct procedure for preparing acid solutions. **Always** add the acid slowly to the water.
22. Keep the balance and scale area clean. **Never** place chemicals directly on the pan of a balance or top of a scale.
23. After completing an experiment, clean and put away your equipment. Clean your work area. Make sure the gas and water are turned off. Wash your hands with soap and water before you leave the lab.

