

## SAFETY GUIDELINES

The investigations that you will be performing as part of your coursework can be both interesting and rewarding. Some labs will provide you with the opportunity to experience firsthand some of the things described in lecture. Laboratory work is an integral part of this course and can give you a chance to develop new and valuable analytical skills.

In the course of your lab work, you may be handling strong chemicals, sharp instruments, and expensive pieces of equipment. Accidents do not just happen - they are often the result of haste and disregard for safety rules. Some of the safety rules to be followed are listed below. Learn all the safety rules and review them before beginning each activity.

## GENERAL

1. Report all spills and accidents to your teacher immediately.
2. Know the location of emergency equipment (first-aid kit, fire extinguisher, fire blankets, eyewash station, etc.) and how it works.
3. Be familiar with laboratory evacuation procedures.
4. Be prepared to work when you arrive for lab. Read the description of the lab activity prior to beginning your work.
5. No running, pushing, or horseplay in lab.
6. Never touch electrical appliances with wet hands.
7. No open toe shoes are permitted in lab.

## PERSONAL

8. Notify your teacher of any medical problems you have that may relate to lab work, such as allergies, asthma, or unusual sensitivity to irritants.
9. Clothing should be appropriate for working in the lab. Loose clothing should be secured. Long sleeves should be rolled up. Jewelry that might present a safety hazard should not be worn.
10. Long hair should be tied back or covered.

## LAB PREPARATIONS AND PROCEDURES

11. Be sure that you understand the procedure to be employed in any lab activity and possible hazards intrinsic to the lab.
12. Perform only those lab activities assigned by your teacher. Never do anything that is not called for in the lab.
13. Follow all instructions, both written and oral, carefully.
14. Safety glasses, protective gloves and a lab apron should be worn when you are heating substances, working with chemicals, doing dissections or handling living or preserved specimens.
15. Keep all combustible materials away from open flames.
16. Never touch or taste any substances unless specifically instructed to do so by your teacher.
17. Never put your face near the mouth of a container.
18. Any activity that involves harmful vapors should be conducted in the fume hood.

36. Dissecting instruments, such as scissors and scalpels, are very sharp. Always use a cutting motion directed away from yourself.
37. Use your cutting instruments with care. In general, very little force is necessary for making incisions. Excess force will not likely damage delicate tissues.
38. Never touch your eyes while handling preserved specimens. Always wash your hands thoroughly with soap and water after working with specimens.
39. The parts of specimens are never taken outside the lab room for any reason.
40. Dispose of no longer needed specimens and their parts in a special container for specimens.

### HANDLING DISSSECTION

31. Exercise extreme caution when using any burner. Keep your head and clothing away from the heat source.
32. Always turn the burner off when it is not in use.
33. Never heat anything without being instructed to do so.
34. Never look into a container that is being heated.
35. Never point the opening of the test tube toward you or anyone else.

### HEATING SUBSTANCES

29. Do not use cracked or damaged glassware.
30. Never handle broken glass with your bare hands. Sweep up the broken glass and dispose it in a container that is specifically for broken glass.

### HANDLING GLASSWARE

23. Read and double check labels on the container before taking anything.
24. Keep lids on chemical containers when they are not in use.
25. Do not return unused or leftover chemicals to the stock jar.
26. Avoid touching corrosive chemicals with your hands. If chemicals do come in contact with your hands, inform your teacher immediately.
27. When mixing an acid with water, always add the acid to water.
28. All containers and materials must be labeled with your name.

### HANDLING CHEMICALS

19. Dispose of waste materials as instructed by your teacher.
20. Clean and wipe all work surfaces at the end of class.
21. Allow yourself adequate time at the end of each lab session for proper clean-up.
22. Wash your hands thoroughly after lab.