

## Safety Regulations For Science Students

While working in the science laboratory, you will have certain important \_\_\_\_\_ that do not apply to other classrooms. You will be working with materials and apparatus which, if handled carelessly or improperly, have the potential to cause \_\_\_\_\_ or discomfort to someone else as well as yourself.

A science laboratory can be a safe place in which to work if you, the student, are foresighted, alert, and cautious. Violating any of the following regulations will result in you being suspended from class or permanently removed from the class. The following practices will be followed:

1. An \_\_\_\_\_ must be present during the performance of all laboratory work.
2. Report any accident to \_\_\_\_\_ immediately, no matter how \_\_\_\_\_, including reporting any burn, scratch, cut, or corrosive liquid on skin or clothing.
3. Prepare for each laboratory activity by \_\_\_\_\_ all instructions before coming to class. Follow all \_\_\_\_\_ implicitly and intelligently. Make note of any \_\_\_\_\_ in procedure given by the instructor.
4. Any science project or individually planned experiment must be \_\_\_\_\_ by the teacher.
5. Use only those materials and equipment \_\_\_\_\_ by the instructor.
6. Inform the teacher \_\_\_\_\_ of any equipment not working properly.
7. Clean up any nonhazardous \_\_\_\_\_ on the floor or workspace \_\_\_\_\_.
8. Wear appropriate \_\_\_\_\_, as directed by the instructor, whenever you are working in the laboratory. Safety goggles must be worn during hazardous \_\_\_\_\_ involving caustic/corrosive chemicals, heating of liquids, and other activities that may injure the eyes.
9. Splashes and fumes from hazardous chemicals present a special danger to wearers of \_\_\_\_\_. Therefore, students should preferably wear regular glasses (inside splash-proof goggles, when appropriate) during all class activities or purchase personal splash-proof goggles and wear them whenever exposure to chemicals or chemical fumes is possible. Students with open skin wounds on hands must wear gloves or be excused from the laboratory activity.
10. Never \_\_\_\_\_ hot equipment or dangerous chemicals through a \_\_\_\_\_ of students.
11. Check \_\_\_\_\_ and equipment instructions carefully. Be sure correct items are \_\_\_\_\_ in the proper manner.
12. Be aware if the \_\_\_\_\_ being used are hazardous. Know where the material safety data sheet (\_\_\_\_\_) is and what it indicates for each of the hazardous chemicals you are using.
13. Never \_\_\_\_\_ anything or touch chemicals with the hands, unless \_\_\_\_\_ instructed to do so.
14. Test for odor of chemicals only by \_\_\_\_\_ your hand above the container and sniffing cautiously from a \_\_\_\_\_.

15. Eating or drinking \_\_\_\_\_ the laboratory or from laboratory equipment is \_\_\_\_\_ permitted.
16. Use a \_\_\_\_\_ pipette filler (never the mouth) when measuring or transferring small quantities of liquid with a pipette.
17. When heating material in a test tube, do not \_\_\_\_\_ into the tube or point it in the direction of any person during the process.
18. Never pour \_\_\_\_\_ back into bottles, exchange stoppers of bottles, or lay stoppers on the table.
19. When diluting \_\_\_\_\_, always pour acids into \_\_\_\_\_, never the reverse. Combine the liquids slowly while stirring to distribute heat buildup throughout the mixture.
20. Keep \_\_\_\_\_ away from face, eyes, and clothes while using solutions, specimens, equipment, or materials in the laboratory. Wash hands as necessary and wash thoroughly at the \_\_\_\_\_ of the laboratory period.
21. To treat a burn from an acid or alkali, wash the affected area \_\_\_\_\_ with plenty of running water. If the eye is involved, irrigate it at the eyewash station without interruption for \_\_\_\_\_ minutes. Report the incident to your instructor immediately.
22. Know the \_\_\_\_\_ of the emergency shower, eyewash and facewash station, fire blanket, fire extinguisher, fire alarm box, and exits.
23. Know the proper fire and earthquake drill \_\_\_\_\_.
24. Roll long sleeves above the \_\_\_\_\_. Long, hanging necklaces, bulky jewelry, and excessive and bulky clothing should not be \_\_\_\_\_ in the laboratory.
25. Confine long hair during a \_\_\_\_\_ activity.
26. Wear shoes that \_\_\_\_\_ the toes, rather than sandals, in the laboratory.
27. Keep work areas \_\_\_\_\_. Floors and aisles should be kept \_\_\_\_\_ of equipment and materials.
28. Light gas \_\_\_\_\_ only as instructed by the teacher. Be sure no \_\_\_\_\_ materials (such as alcohol or acetone) are being used nearby. Use a burner with \_\_\_\_\_ caution. Keep your head and clothing away from the flame and turn it off when not in use.
29. Use a fire blanket (stop, drop, and roll) to \_\_\_\_\_ any flame on a person.
30. Dispose of laboratory waste as \_\_\_\_\_ by the teacher. Use separate, designated containers (not the \_\_\_\_\_) for the following:
  - Matches, litmus paper, wooden splints, \_\_\_\_\_, and so on
  - \_\_\_\_\_ and waste glass

- Rags, paper towels, or other absorbent materials used in the cleanup of \_\_\_\_\_ solids or liquids
  - Hazardous/toxic \_\_\_\_\_ and solids
31. Place books, purses, and such items in the designated storage area. Take \_\_\_\_\_ laboratory manuals and notebooks into the \_\_\_\_\_ area.
  32. Students are not permitted in laboratory \_\_\_\_\_ rooms or teachers' workrooms without the approval of the \_\_\_\_\_.
  33. To cut small diameter glass tubing, use a \_\_\_\_\_ or tubing cutter to make a deep scratch. Wrap the tubing in a paper towel before breaking the glass away from you with your thumbs. Fire polish all ends.
  34. Hot and cold glass has the same \_\_\_\_\_ appearance. Determine whether an object is hot by bringing the back of your hand close to the object.
  35. Match hole sizes and tubing when inserting glass tubing into a stopper. If necessary, expand the hole first by using an appropriate size cork borer. Lubricate the stopper hole and glass tubing with water or glycerin to ease insertion, using towels to \_\_\_\_\_ the hand. Carefully twist (never push) glass tubing into stopper holes.
  36. Remove all \_\_\_\_\_ glass from the work area or floor as soon as possible. Never handle broken glass with bare hands; use a counter \_\_\_\_\_ and dustpan.
  37. Report broken glassware, including thermometers, to the instructor \_\_\_\_\_.
  38. Operate electrical equipment only in a dry area and with \_\_\_\_\_ hands.
  39. When removing an electrical plug from its socket, pull the \_\_\_\_\_, not the electrical cord.
  40. Treat all animals in the science laboratory \_\_\_\_\_; that is, with respect and consideration for their care.
  41. Always approach laboratory experiences in a \_\_\_\_\_ and courteous manner.
  42. Always \_\_\_\_\_ the laboratory area \_\_\_\_\_ leaving.
  43. Students and teacher wash hands with \_\_\_\_\_ and water before leaving the laboratory area.
  44. When heating volatile or flammable materials, use a water bath; that is, heat the materials in or over heated water, using a hot plate to heat the water. \_\_\_\_\_ all open flames.
  45. Exercise \_\_\_\_\_ in using scissors, scalpels, dissecting needles, and other sharp-edged instruments. Pass them with handles extended when handing them to other persons.
  46. Wash all sharp-edged and pointed instruments \_\_\_\_\_ from other equipment.

47. Use great care when working with ether or other volatile liquids. Windows and doors should be opened for greatest possible \_\_\_\_\_. Be sure that caps or lids of containers used for chemicals are securely \_\_\_\_\_.
48. Rinse \_\_\_\_\_ specimens occasionally or whenever fumes or chemicals are released in the dissection process.
49. Never handle animals in the laboratory unless directed to do so by the \_\_\_\_\_.
50. Never insert your fingers or objects through the wire mesh of animal \_\_\_\_\_ to pet or tease the animals.
51. Notify the instructor \_\_\_\_\_ if an animal bites you.
52. Never bring animals or poisonous \_\_\_\_\_ to school.
53. Never open \_\_\_\_\_ dishes containing bacterial or fungal growth unless directed to do so by the instructor.
54. Dispose of all discarded bacterial and fungal cultures by \_\_\_\_\_ as directed by the instructor.
55. Inform the teacher \_\_\_\_\_ of any equipment not working properly.
56. When \_\_\_\_\_ with lasers or apparatus that produce X rays, microwaves, or ultraviolet rays, make certain that proper shielding and other precautions are used.
57. Use the fume hood whenever noxious, corrosive, or toxic \_\_\_\_\_ are produced or released.
58. Be sure all glassware is \_\_\_\_\_ before use. Clean glassware thoroughly \_\_\_\_\_ use. Residue may cause errors in new experiments or cause a \_\_\_\_\_ reaction or explosion.

**The following actions will result in both immediate removal from class as well as being dropped from the class:**

\_\_\_\_\_ the plastic cover and /or \_\_\_\_\_ the “Big Red Button” in the front of the classroom.

\_\_\_\_\_ of safety equipment including, but not limited to  
 eyewash stations  
 emergency showers  
 fire extinguishers  
 fire blanket

\_\_\_\_\_ of any materials or equipment from the classroom or laboratory

\_\_\_\_\_ school equipment or furniture.

\_\_\_\_\_ or causing harm to others.

***Note: Persistent or willful violation of the regulations will result in the loss of laboratory privileges and possible dismissal from the class.***

