

OHS Student Laboratory Safety Contract

Purpose

Science is a hands-on laboratory class. You will be doing many laboratory activities which require the use of hazardous chemicals. Safety in the classroom is the #1 priority for students, teachers and parents. To ensure a safe science classroom, a list of rules has been developed and provided to you in this student safety contract. They must be followed at all times. Two copies of the contract are provided. One copy is to be signed by both you and a parent/guardian. The other is to be kept in your science notebook as a constant reminder of safety rules.

General Guidelines:

1. Conduct yourself in a responsible manner at all times in the laboratory.
2. Follow all written and verbal instructions carefully. If you do not understand a direction or part of the procedure, ask the instructor before proceeding.
3. Never work alone. No student may work in the laboratory without an instructor present.
4. When first entering a science room, do not touch any equipment, chemicals, or materials in the laboratory until you are instructed to do so.
5. Do not eat, drink or chew gum. Do not use laboratory glassware as containers for food or beverage.
5. Perform only those experiments authorized by your instructor. Never do anything in the laboratory that is not called for in the laboratory procedures or by your instructor. Carefully follow all directions, both written and oral. Unauthorized experiments are prohibited.
7. Be prepared for your work in the laboratory. Read all procedures thoroughly before entering the laboratory. Never fool around in the laboratory. Horseplay, practical jokes, and pranks are dangerous and prohibited.
3. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times. Bring only your laboratory instructions, worksheets, and/or reports to the lab area. Other materials (books, purses, backpacks) should be stored in the classroom area.
9. Keep aisles clear and your chair pushed under your desk.
10. Know the locations and operating procedures of all the safety equipment including the first aid kit, the eye wash station, safety shower, fire extinguisher, and fire

blanket. Know where the fire alarm and exits are located.

11. Always work in a well ventilated area. Use the fume hood when working with volatile substances or poisonous vapors. Never place your head into the fume hood.

12. Be alert and proceed with caution at all times in the laboratory. Notify the instructor immediately of any unsafe conditions you observe.

13. Dispose of all chemical waste properly. Never mix chemicals in sink drains. Sinks are to be used only for water and solutions designated by the instructor. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in proper waste containers, not in the sink. Check the label of all waste containers twice before adding your chemical waste to the container.

14. Labels and equipment instructions must be read carefully before use. Set up and use the prescribed apparatus as directed in the laboratory instructions or by your instructor.

15. Keep hands away from face, eyes, mouth, and body while using chemicals or preserved specimen. Wash your hands with soap and water after performing all experiments. Clean (with detergent), rinse, and wipe dry all work surfaces (including the sink) and apparatuses at the end of the experiment. Return all equipment clean and in working order to the proper storage area.

16. Experiments must be personally monitored at all times. You will be assigned a laboratory station at which to work. Do not wander around the room, distract other students, or interfere with the laboratory experiments of others.

17. Students are never permitted in the science storage rooms or preparation areas unless given specific permission by their instructor.

18. Know what to do if there is a fire drill during a laboratory period; containers must be closed, gas valves turned off, fume hoods turned off, and any electrical equipment turned off.

19. Handle all living organisms used in a laboratory activity in a humane manner. Preserved biological materials are to be treated with respect and disposed of properly.

20. When using knives and other sharp instruments, always carry the points and tips pointing down. Always cut away from your body. Never try to catch falling sharp instruments. Grasp sharp instruments only by the handles.

Clothing

21. Any time chemicals, heat or glassware are used, students will wear laboratory goggles. There will be no exceptions!
22. Contact lenses should not be worn in the laboratory unless you have permission by your instructor.
23. Dress properly during laboratory activities. Long hair, dangling jewelry, and loose/baggy clothing are a hazard in the laboratory. Long hair must be tied back, and dangling jewelry and loose/baggy clothing secured. Shoes must completely cover the foot; no sandals are allowed.
24. Long pants are required for lab work and natural fibers are suggested.

25. Accidents and Injuries

26. Report any accidents (spill, breakage etc.) or injury (cut, burn, etc.) to the instructor immediately, no matter how trivial it may appear.
27. If you or your lab partner are hurt immediately yell out "code one, code one" to get the instructor's attention.
28. If a chemical should splash in your eyes or on your skin, immediately flush with running water from the eye wash station or safety shower for at least 20 minutes. Notify the instructor immediately. When mercury thermometers are broken, mercury must not be touched. Notify the instructor.

29. Handling Chemicals

30. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemicals unless instructed to do so. The proper technique to smell chemicals will be demonstrated.
31. Check the label on chemical bottles twice before removing any of the contents. Take only as much as you need.
32. Never return unused chemicals to their original containers.
33. Never use mouth suction to fill a pipette. Use a rubber bulb or pipette bulb.
34. When transferring reagents from one container to another, hold the containers away from your body.
35. Acids must be handled with extreme care. You will be shown the proper method for diluting strong acids. Always add acid to

water, swirl or stir the solution, and be careful of the heat produced, particularly with sulfuric acid.

36. Handle flammable hazardous liquids over a pan to contain spills. Never dispense flammable liquids anywhere near a source of flame or heat.
37. Take great care when transferring acids and other chemicals from one part of the laboratory to another. Hold them securely and walk carefully.

H Handling Glassware and Equipment

38. Carry glass tubing, especially long pieces, in a vertical position to minimize the likelihood of breakage or injury.
39. Never handle broken glass with your bare hands. Use a brush and a dustpan to clean up broken glass. Place broken or waste glass in the designated broken glass container.
40. Inserting and removing glass tubing from rubber stoppers can be dangerous. Always lubricate glassware (tubing, thistle tubes, thermometers, etc.) before attempting to insert it into a stopper. Always protect your hands with towels or cotton gloves when inserting glass tubing, or removing it from, a rubber stopper. If a piece of glassware becomes "frozen" in a stopper, take it to your instructor for removal.
41. Fill the wash bottles only with distilled water and use only as intended, ex. rinsing glassware, or adding water to a container.
42. When removing an electrical plug from its socket, grip the plug, not the electrical cord. Hands must be completely dry before touching an electrical switch, plug, or outlet.
43. Examine the glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.
44. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
45. If you do not understand how to use a piece of equipment, ask the instructor for help.
46. Do not immerse hot glassware in cold water, it may shatter.

H Heating Substances

47. Exercise extreme caution when using a gas burner. Take care that hair, clothing, and hands are a safe distance from the flame

at all times. Do not put any substance into the flame unless specifically instructed to do so. Never reach over an exposed flame. Light gas (or alcohol) burners only as instructed by the teacher.

- 48. Never leave a lit burner unattended. Never leave anything that is being heated or is visibly reacting unattended. Always turn the burner or hot plate off when not in use.
- 49. You will be instructed in the proper method of heating and boiling liquids in test tubes. Do not point the open end of a test tube being heated at yourself or any one else.
- 50. Heated metals and glass remain hot for a long time. They should be set aside to cool and only be picked up with caution. Use tongs or heat protective gloves if necessary.
- 51. Never look into a container that is being heated.
- 52. Do not place hot apparatuses directly on the laboratory desk. Always use an insulating pad. Allow plenty of time for hot apparatuses to cool before touching.
- 53. When bending glass, allow time for the glass to cool before handling. Hot and cold glass have the same visual appearance. Determine if an object is hot by bringing the back of your hand close to it prior to grasping it.

Questions

Do you wear contact lenses? yes___ no___
Are you color blind? yes___ no___
Do you have any allergies? yes___ no___

If yes, please list: _____

Agreement

I, _____(student's name) have read and agree to follow all of the safety rules set forth in this contract. I realize that I must obey these rules to ensure my own safety, and that of my fellow students and instructors. I will cooperate to the fullest extent with my instructor and fellow students to maintain a safe lab environment. I will always closely follow the oral and written instructions provided by the instructor. I am aware that any violation of this safety contract that results in unsafe conduct in the laboratory or misbehaviour on my part, may result in being removed from the laboratory, study hall,

receiving a failing grade, and/or dismissal from the course.

student name (print)

student signature

date

Dear Parent or Guardian:

We feel that you should be informed regarding the school's effort to create and maintain a safe science classroom/laboratory environment. With the cooperation of the instructors, parents, and students, a safety instruction program can eliminate, prevent, and correct possible hazards. You should be aware of the safety instructions your son/daughter will receive before engaging in any laboratory work. Please read the list of safety rules above. No student will be permitted to perform laboratory activities unless this contract is signed by both student and parent/guardian and is on file with the teacher. Your signature on this contract indicates that you have read this Student Safety Contract, are aware of the measures taken to insure the safety of your student in the science laboratory, and will instruct your son/daughter to uphold his/her agreement to follow these rules and procedures in the laboratory.

parent/guardian

date

