

# Physical Science Safety Contract

## PURPOSE

Science is a hands-on laboratory class. Students will be doing many laboratory activities which require the use of chemicals, laboratory equipment, and other hazardous items. Safety in the science classroom is the # 1 priority for students, teachers, and parents. To ensure a safe classroom, a list of rules has been developed and provided to you in this student safety contract. These rules must be followed at all times. **The contract must be signed by both the student and a parent before participating in the laboratory.**

## 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 a procedure, ask the teacher before proceeding.
3. Never work alone. No student may work in the laboratory without the teacher present.
4. When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
5. Perform only those experiments authorized by your teacher. Carefully follow all instructions, both written and oral. Unauthorized experiments are prohibited.
6. Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages.
7. Be prepared for your work in the laboratory. Read all procedures thoroughly before entering the laboratory.
8. Never fool around in the laboratory. Horseplay, practical

jokes, and pranks are dangerous and prohibited.

9. 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 work area. Other materials (books, purses, backpacks, etc.) should be stored in the classroom area.
10. Keep aisles clear. Push your chair under the desk when not in use.
11. Know the locations and operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, fire extinguisher, and fire blanket. Know where the fire alarm and the exits are located.
12. Always work in a well-ventilated area.
13. Be alert and proceed with caution at all times in the laboratory. Notify the teacher immediately of any unsafe conditions you observe.
14. Dispose of all chemical waste properly. Never mix chemicals in sink drains. Sinks are to be used only for water and those solutions designated by the teacher. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in the proper waste containers, not in the sink. Check with your teacher for disposal of chemicals and solutions.
15. Labels and equipment instructions must be read carefully before use. Set up and use the equipment as directed by your teacher.
16. Keep hands away from face, eyes, mouth, and body while using chemicals or lab equipment. Wash your hands with soap and water after performing all experiments. Clean all work surfaces and apparatus at

the end of the experiment. Return all equipment clean and in working order to the proper storage area.

17. Experiments must be personally monitored at all times. Do not wander around the room, distract other students, startle other students or interfere with the laboratory experiments of others.
18. Students are never permitted in the science storage rooms or preparation areas unless given specific permission by the teacher.
19. Know what to do if there is a fire drill during a laboratory period; containers must be closed, gas valves turned off, and any electrical equipment turned off.
20. When using knives and other sharp instruments, always carry with tips and points pointing down and away. Always cut away from your body. Never try to catch falling sharp instruments. Grasp instruments only by the handles.
21. If you have a medical condition (e.g., allergies, pregnancy, etc.), check with your physician prior to working in lab.

## CLOTHING

22. Any time chemicals, heat, or glassware are used, students will wear safety goggles. **NO EXCEPTIONS TO THIS RULE!**
23. Contact lenses should not be worn in the laboratory unless you have permission from your teacher.
24. Dress properly during a laboratory activity. Long hair, dangling jewelry, and loose or baggy clothing are a hazard in the laboratory. Long hair must be tied back and dangling jewelry and baggy clothing must be secured. Shoes must completely cover the foot. No sandals allowed.

25. Lab aprons have been provided for your use and should be worn during laboratory activities.

### **ACCIDENTS AND INJURIES**

26. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the teacher immediately, no matter how trivial it seems.

27. If you or your lab partner is hurt, get the teacher's attention.

28. If a chemical should splash in your eye(s) or on your skin, immediately flush with running water for at least 20 minutes. Notify the instructor immediately.

### **HANDLING CHEMICALS**

29. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemicals unless specifically instructed to do so. The proper technique for smelling chemical fumes will be demonstrated to you.

30. Check the label on all chemical bottles twice before removing any of the contents. Take only as much chemical as you need.

31. Never return unused chemicals to their original container.

32. When transferring reagents from one container to another, hold the containers away from your body.

33. Acids must be handled with extreme care. Always add acid to water, swirl or stir the solution, and be careful of the heat produced.

34. Handle flammable hazardous liquids over a pan to contain spills. Never dispense flammable liquids anywhere near an open flame or source of heat.

35. Take great care when transporting acids and other chemicals from one part of the laboratory to another. Hold them securely and walk carefully.

36. Never remove chemicals or other materials from the laboratory area.

### **HANDLING GLASSWARE AND EQUIPMENT**

37. Carry glass tubing, especially long pieces, in a vertical position to minimize the likelihood of breakage and injury.

38. Never handle broken glass with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken glass in the designated glass disposal container.

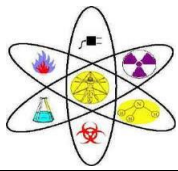
39. When removing an electrical plug from its socket, grasp the plug, not the electrical cord. Hands must be completely dry before touching an electrical switch, plug, or outlet.

40. Examine glassware before each use. Never use chipped, cracked, or dirty glassware.

41. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.

42. If you do not understand how to use a piece of equipment, ask the teacher for help.

43. Do not immerse hot glassware in cold water; it may shatter.



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## QUESTIONS (answers are confidential)

44. Do you wear contact lenses?

Yes \_\_\_\_\_ No \_\_\_\_\_

45. Are you color blind?

Yes \_\_\_\_\_ No \_\_\_\_\_

46. Do you have allergies?

Yes \_\_\_\_\_ No \_\_\_\_\_

If so, please list specific allergies

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## STUDENT 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 insure my own safety and that of my fellow students and teachers. I will cooperate to the fullest extent with my instructor and fellow students to maintain a safe science lab environment. I will also 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 misbehavior on my part may result in my being removed from the laboratory, receiving a failing grade, and/or further disciplinary action.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

## PARENT AGREEMENT

Dear Parent or Guardian:

We feel that you should be informed regarding our efforts to create and maintain a safe science classroom/laboratory environment. With the cooperation of the teachers, parents, and students, a safety instruction program can eliminate, prevent, and correct possible hazards. You should be aware of the safety instructions your son or 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 the 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 son/daughter in the science laboratory, and will instruct your son/daughter to uphold his or her agreement to follow these rules and procedures in the laboratory.

\_\_\_\_\_  
Parent/Guardian Signature

\_\_\_\_\_  
Date