



High School Student Science Safety Contract



Student Name _____ School _____

Teacher _____ Science Course _____ Period _____

Purpose: Science is a hands-on laboratory class. You will be doing many laboratory activities that require the use of potentially hazardous chemicals. Safety in the science classroom is the first 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 science safety contract. These rules must be followed at all times. A copy of this contract should be signed by you and your parent/guardian and kept in your science notebook.

General Rules:

1. Act responsibly at all times. Never fool around in the laboratory. Horseplay, practical jokes, and pranks are dangerous.
2. Follow all written and verbal instructions carefully. If you do not understand a direction or part of a procedure, ask the instructor for help.
3. Never work alone. No student may work in the laboratory without an instructor present.
4. Do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
5. Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages. Food items should not be brought into the science laboratory.
6. Perform only those experiments authorized by the instructor. Never do anything in the laboratory that is not called for in the laboratory procedures or by your instructor. Carefully follow all instructions, 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. Notify the instructor immediately of any unsafe conditions you observe.
8. Work areas should be kept neat and clean at all times. Bring only your laboratory instructions, worksheets, and/or reports to the work area.
9. Keep aisles clear. Push your chair under the desk when not in use.
10. 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 emergency 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. 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 instructor. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in the proper waste containers. Check waste container labels before adding your chemical waste to the container.
13. Read labels and equipment instructions carefully before use. Follow your teacher's instructions.
14. Do not touch your face, eyes, mouth or body during labs using chemicals or preserved specimens. Wash your hands with soap and water after performing all experiments. Clean all work surfaces and equipment at the end of the experiment.

15. Students are never permitted in the science storage rooms or preparation areas unless given specific permission by their instructor.
16. 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.
17. 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.
18. Use caution with knives and other sharp instruments and carry them with tips and points pointing down and away. Always cut away from your body.

Clothing:

19. Always wear laboratory goggles when working with chemicals, heat, or glassware. Contact lenses should not be worn in the laboratory unless you have permission from your instructor.
20. Long hair must be tied back and dangling jewelry and loose or baggy clothing must be secured. Shoes must completely cover the foot. **For example, only close-toed shoes like tennis shoes, shall be worn during labs. No exceptions. Sandals, flip-flops, and high heels are prohibited.**
21. Lab aprons should be worn when deemed necessary by your instructor.

Accidents and Injuries:

22. Immediately report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the instructor.
23. If a chemical splashes in your eye(s) or on your skin, immediately flush with running water from the eyewash station or safety shower for at least 20 minutes. Notify the instructor immediately.

Handling Chemicals, Glassware and Equipment:

24. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemicals unless specifically instructed to do so.
25. Check the label on chemical bottles twice before using. Take only as much chemical as you need.
26. Never return unused chemicals to their original containers.
27. Only use a rubber bulb or pipet pup to fill a pipette. **Never** use your mouth to pipet.
28. Hold containers away from your body when moving chemicals.
29. Handle acids and bases with extreme care. Follow instructions for diluting acids. Always add acid to water, swirl or stir the solution and be careful of the heat produced.
30. Use flammable hazardous liquids over a pan to contain potential spills. Never use flammable liquids anywhere near an open flame or source of heat.
31. Never remove chemicals or other materials from the laboratory area.
32. Transport all chemicals with great care. Make sure your path is clear, then hold them securely and walk carefully.
33. Carry glass tubing in a vertical position to minimize the likelihood of breakage and injury.
34. Never handle broken glass with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.
35. Always lubricate glassware (tubing, thermometers, etc.) before inserting it in a stopper. Protect your hands with towels or gloves when inserting glass tubing into, or removing it from, a rubber stopper. Do not force it! Ask your instructor for help with frozen or tricky glassware issues.
36. Fill wash bottles only with distilled water and use only as intended.

- 37. When removing an electrical plug from its socket, be sure your hands are completely dry. Always pull the plug, not the electrical cord. Do not use damaged electrical equipment.
- 38. Examine glassware before each use. Never use chipped, cracked or dirty glassware.
- 39. Do not put hot glassware in cold water; it may shatter.

Heating Substances:

- 40. Exercise extreme caution when using a gas burner. Keep hair, clothing and hands at 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.
- 41. Never leave a lit burner, anything being heated or visibly reacting, unattended. **Always** turn the burner or hot plate off when not in use. Never look into a container that is being heated.
- 42. Do not point the open end of a test tube being heated at yourself or anyone else.
- 43. Heated metals and glass remain very hot for a long time. They should be set aside to cool and picked up with caution. Use tongs or heat-protective gloves if necessary.
- 44. Always use an insulating pad when placing hot items on a lab table. Allow plenty of time for the items to cool before touching them. Determine if an object is hot by bringing the back of your hand close to it prior to grasping it.

Safety Questions:

- 45. Do you wear contact lenses?
 Yes No
- 46. Do you have color blindness?
 Yes No
- 47. Do you have any allergies?
 Yes No

If so, list specific allergies: _____

Student and Parent/Guardian Agreement

I, _____ (student's name), have read and agree to follow all of the safety rules in this Science Safety Contract. I agree to follow these rules to ensure my own safety, and the safety 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 closely follow all oral and written instructions provided by the instructor. I am aware that any violation of this Science Safety Contract that results in unsafe conduct in the laboratory or misbehavior on my part, may result in being removed from the laboratory, detention, receiving a failing grade, and/or dismissal from the course.

 Student Name (printed) Student Signature Date

 Parent/Guardian Name (printed) Parent/Guardian Signature Date