



Science Safety Contract

Purpose:

Science is a hands-on laboratory class and involves activities which may require the use of potentially hazardous equipment, procedures, and chemicals. Safety must be the top priority for students, teachers, and parents! Read all rules and procedures carefully. All rules and procedures must be followed at all times. This document must be read and signed by the student and by a parent or guardian before participation will be allowed.

Conduct in the laboratory:

- Do not throw objects or mess around with equipment or chemicals.
- Do not engage in practical jokes, pranks, or rowdy activities.
- Do not run, jump, or play around.
- Do not sit on lab benches.
- Do not use personal phones, audio equipment or video equipment.
- The performance of unauthorized experiments is strictly forbidden.

General Work Procedures:

- Know emergency procedures.
- Never work in the laboratory without the supervision of a teacher.
- Always perform the experiments or work as precisely as directed by the teacher.
- Immediately report any spills, accidents, or injuries to the teacher.
- Never leave experiments while in progress.
- Never attempt to catch a falling object.
- Be careful when handling hot glassware and apparatus. (It looks the same as cold)
- Never point the end of a test tube containing a substance at yourself or others.
- Never fill a pipette using mouth suction. Always use a pipetting device.
- Make sure no flammable solvents are in the surrounding area when lighting a flame.
- Do not leave a lit Bunsen burner unattended.
- Turn off all heating apparatus, gas valves, and water faucets when not in use.
- Do not remove any equipment or chemicals from the laboratory.
- Coats, bags and other personal items must be stored in designated areas, not on the bench tops or in the aisle ways.
- Notify your teacher of any sensitivity that you may have to particular chemicals if known.
- Keep the floor clear of all objects (such as ice, small objects, and spilled liquids).

Housekeeping

- Keep work area neat and free of unnecessary objects.
- Thoroughly clean your work space at the end of the laboratory session.
- Do not block the sink drains with debris.
- Never block access to exits or emergency equipment.
- Inspect all equipment for damage (cracks, defects, stars, etc.) prior to use; do not use damaged equipment.
- Never pour chemical waste into the sink drains or wastebaskets.
- Place chemicals in appropriately labeled waste containers.
- Immediately dispose of broken glassware and other sharp objects in designated containers.
- Properly dispose of gloves, filter paper, weigh boats, and paper towels.

Apparel in the Laboratory:

- Always wear appropriate chemical splash goggles in the laboratory.
- Wear disposable gloves, as provided, when handling hazardous materials. Remove gloves before exiting the laboratory.
- Wear a full-length, long-sleeved laboratory coat or chemical resistant apron.
- Wear shoes that adequately cover the whole foot; low-heeled shoes with non-slip soles are preferable. Do not wear sandals, open-toed shoes, open-backed shoes, or high-heeled shoes in the laboratory.
- Long pants are preferred. Expose as little skin as possible in the laboratory.
- Secure long hair and loose clothing (especially loose sleeves and scarves).
- Remove dangling jewelry.
- Synthetic fingernails are not recommended because they are extremely flammable.

Hygiene Practices:

- Keep your hands away from your face, eyes, mouth, and body while using chemicals.
- No food or drink (open or closed) are allowed in laboratory or chemical storage areas.
- Never use laboratory glassware for eating or drinking purposes.
- Do not apply cosmetics while in the laboratory or storage areas.
- Wash hands after removing gloves, and before leaving the laboratory.
- Remove all protective equipment before leaving the laboratory.

Emergency Procedures:

- Know the location of all exits in the laboratory and building.
- Know the location of the emergency phone.
- Know the location of and how to operate the following: fire extinguishers, alarm systems, fire blankets, eye washes, first-aid kits, safety showers.
- In case of emergency, follow all instructions explained by the teacher.

Chemical Handling:

- Double check the label to verify it is the correct substance before using it.
- Wear appropriate gloves for the chemicals you are handling. Glove ratings vary.
- If you transfer chemicals from their original containers, label chemical containers as to the contents, concentration, hazard, date, and your initials.
- Always use a spatula or scoopula to remove a solid reagent from a container.
- Do not directly touch any chemical with your hands.
- Never use a metal spatula when working with peroxides. This could cause an explosion.
- Always hold containers away from the body, especially when transferring a substance.
- Use a hot water bath to heat flammable liquids; never heat directly with a flame.
- Add concentrated acid to water slowly. Never add water to acid.
- Weigh out or remove only the amount of chemical you will need. Do not return the excess to its container. Dispose of excess chemical in the appropriate waste container.
- Never touch, taste, or smell any reagents.
- Never place a container directly under your nose to smell it. Waft it as instructed.
- Never mix or use chemicals not called for in the laboratory instructions.
- Use the laboratory chemical hood, if available, when there is a possibility of release of toxic chemical vapors, dust, or gases. When using a hood, the sash opening should be kept at a minimum to protect the user and to ensure efficient operation of the hood. Keep your head and body outside of the hood. Chemicals and equipment should be placed at least six inches inside the hood to ensure proper air flow.
- Clean up all spills properly and promptly as instructed by the teacher.
- Dispose of chemicals as instructed by the teacher.
- When transporting chemicals (especially 250 mL or more), place the immediate container in a secondary container or bucket (rubber, metal or plastic) designed to be carried and large enough to hold the entire contents of the chemical.
- Never handle bottles that are wet or too heavy for you.
- Use all equipment in the correct way, as instructed by the teacher.



Science Safety Contract

Signature Page

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|--------------------------------|-----|----|
| 1. Do you wear contact lenses? | YES | NO |
| 2. Do you wear glasses? | YES | NO |
| 3. Are you colorblind? | YES | NO |
| 4. Do you have allergies? | YES | NO |

If yes, please list specific allergies _____

Student Agreement:

I, _____ (student's name) have read and agree to follow all of the safety rules set forth in the Science Safety 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 by instructor and fellow students to maintain a safe 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 which 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 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 laboratory/classroom 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 student will receive before engaging in any laboratory work. No student will be allowed to participate in laboratory activities unless this contract is signed by both the student and the parent/guardian and returned to the teacher.

Parent/Guardian Agreement:

I, _____ (parent/guardian's name) have read the rules and procedures listed in the Science Safety Contract. I agree to instruct my student to follow these rules and procedures in the laboratory.

Parent/Guardian Signature

Date