



STUDENT SCIENCE SAFETY RULES AGREEMENT

Safety is a number one priority at SLPS. Life threatening injuries can happen in the laboratory. For that reason, students need to be informed of and held accountable for the correct way to act and things to do in the laboratory.

CONDUCT

- Do not engage in practical jokes or boisterous conduct in the laboratory.
- Never run in the laboratory.
- The use of personal audio or video equipment is prohibited in the laboratory.
- The performance of unauthorized experiments is strictly forbidden.
- Do not sit on laboratory benches.

GENERAL SAFETY PROCEDURE

- Obey all safety rules and regulations and understand the consequences of safety rule violations as specified in this manual in the section. Sign the **SLPS Student Science Safety Rules Agreement** and turn in to your science teacher and/or school administration.
- Follow teacher's additional safety instructions provided for specific activities in the laboratory.
- Be familiar with the properties and hazards of the laboratory chemicals in use.
- Never remove chemicals, other laboratory materials, or equipment from the science room.
- Never work in the laboratory without the supervision of a teacher.
- Immediately report any spills, accidents, or injuries to a teacher.
- Never leave experiments while in progress.
- Never attempt to catch a falling object.
- Be careful when handling hot glassware and apparatus in the laboratory.
- Hot glassware looks just like cold glassware. Use tongs or pads.
- Never point the open 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 lit Bunsen burners 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 sensitivities that you may have to particular chemicals if known.
- Keep the floor clear of all objects (e.g., ice, small objects, spilled liquids).

HOUSEKEEPING

- Keep work area neat and free of any unnecessary objects. Thoroughly clean your laboratory 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, etc.) prior to use; do not use damaged equipment.
- Never pour chemical waste into the sink drains or wastebaskets, unless specified by the teacher.
- Place chemical waste in appropriately labeled waste containers.
- Properly dispose of broken glassware and other sharp objects (e.g., syringe needles) immediately in designated containers.
- Properly dispose of weigh boats, gloves, filter paper, and paper towels in the laboratory, as per teacher's instructions.



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APPAREL IN LABORATORY

- Always wear appropriate eye protection (i.e., chemical splash goggles) in the laboratory.
- Wear disposable gloves, as provided in the laboratory, when handling hazardous materials.
- Remove the gloves before exiting the laboratory.
- Wear a full-length, long-sleeved laboratory coat or chemical-resistant apron, whenever instructed by the teacher or procedure from the activity.
- 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.
- Avoid wearing shirts exposing the torso, shorts, or short skirts; long pants that completely cover the legs are preferable.
- Secure long hair and loose clothing (especially loose long sleeves, neck ties, or scarves). Remove jewelry (especially dangling jewelry). Roll long sleeves above the wrist.
- Synthetic finger nails are not recommended in the laboratory; they are made of extremely flammable polymers which can burn to completion and are not easily extinguished.

HYGIENE PRACTICES

- Keep your hands away from your face, eyes, mouth, and body while using chemicals.
- Food and drink, open or closed, should never be brought into the laboratory or chemical storage area.
- Never use laboratory glassware for eating or drinking purposes.
- Do not apply cosmetics while in the laboratory or storage area.
- Wash hands after removing gloves, and before leaving the laboratory.
- Remove any protective equipment (i.e., gloves, lab coat or apron, chemical splash goggles) before leaving the laboratory.

EMERGENCY PROCEDURE

- Know the location of all the exits in the laboratory and building.
- Know the location of the emergency phone.
- Know the location of and know how to operate the following:
 - Fire extinguishers
 - Alarm systems with pull stations
 - Fire blankets
 - Eye washes
 - First-aid kits
 - Safety showers
 - Broken glass and/or sharps box
- In case of an emergency or accident, follow the established emergency plan as explained by the teacher and/or evacuate the building via the nearest exit as instructed by the teacher and/or school administration.

CHEMICAL HANDLING

- Check the label to verify it is the correct substance before using it.
- Wear appropriate chemical resistant gloves before handling chemicals. Gloves are not universally protective against all chemicals.
- 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, scoopula, or one-time use spoon to remove a solid reagent from a container. Do not directly touch any chemical with your hands.



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- Never use a metal spatula when working with peroxides. Metals will decompose explosively with peroxides.
- Hold containers away from the body when transferring a chemical or solution from one container to another.
- 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 a concentrated acid.
- Weigh out or remove only the amount of chemical you will need.
- Do not return the excess to its original container, but properly dispose of it in the appropriate waste container or as instructed by the teacher.
- Never touch, taste, or smell any reagents.
- Never place the container directly under your nose and inhale the vapors.
- Never mix or use chemicals not called for in the laboratory exercise.
- 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 face. Chemicals and equipment should be placed at least six inches within 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 equipment (glassware, Bunsen burner, etc.) in the correct way, as indicated by the teacher.

RESPONSE TO VIOLATIONS OF THE STUDENT LABORATORY RULES

When a student violates science safety regulation(s), the science teacher and administration will assess the severity AND frequency of offense and administer the appropriate consequence to the student. Here is what to expect:

1st and/or Minor Offense: Verbal reprimand from the teacher, with a written record of the violation maintained. The teacher will review the rule with the student.

2nd and/or Mild Offense: The student will be suspended from laboratory work immediately and sent to the appropriate grade-level administrative office, with a disciplinary referral from the teacher. A written notification about the consequences for the student will also be sent to the parents or guardians. The student will not be permitted to return to and finish that specific laboratory work, with alternative work assignment(s) to be provided in a supervised setting as determined by the building administration to ensure mastery of concepts; however ***the student is responsible for grade decrease due to incomplete laboratory work.***

3rd and/or Serious Offense: If a serious violation was committed, which may have caused harm to human health or the environment, the student will be suspended from laboratory work immediately and sent to the appropriate grade-level administrative office, with a disciplinary referral from the teacher. Written notification will also be sent to the parents or guardians, and a mandatory conference will be scheduled with the parents or guardians, teacher, and building administrator. Depending on the result of that conference, the student may be suspended from laboratory operations for the remainder of the school year. If this occurs, the student will be assigned alternative work assignment(s) to be provided in a supervised setting as determined by the building administration. In addition, ***the student's grade should reflect the lack of progress in planning and carrying out investigations science and engineering practice.***



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STUDENT AGREEMENT I, _____ (student's name), have read and understand the Student Laboratory Safety Rules set forth above. I realize that I must obey these rules to ensure my own safety and that of my fellow students and teachers. I will cooperate to the fullest extent with my teachers and fellow students to maintain a safe working environment in the laboratory. I am aware that violations of this safety will result in disciplinary and academic performance action as specified in this Agreement.

STUDENT SIGNATURE

DATE

PARENT/GUARDIAN ACKNOWLEDGMENT *Note to Parent/Guardian: We believe you should be informed regarding our school's efforts to create and maintain a safe science classroom and laboratory environment. Safety awareness involves the cooperation of parents or guardians, students, and teachers. Please read the Student Laboratory Safety Rules, which details the safety concerns and expected student behaviors in the laboratory. No student will be permitted to perform laboratory activities unless both the student and at least one parent or guardian sign the Agreement and return a signed copy to their teacher.*

By signing below you indicate that you have read this Agreement, are aware of the measures taken to ensure the safety of your child in the science laboratory, and will encourage your child to uphold the agreement to follow these rules and procedures.

PARENT OR GUARDIAN SIGNATURE

DATE