Lab Safety Guidelines

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EPS Science Lab Safety Guidelines

Science labs include work with dangerous chemicals and fire. Life threatening injuries can happen when working in a laboratory. Therefore, knowing what you are working with, what you are doing, and how to be safe in a lab is imperative. Read through the following information. You will be held responsible for these rules.

General Conduct

This refers to behavior within the whole lab space.

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

General Work Procedure

This refers to behavior within your individual lab space.

- Know emergency procedures.
- Never work in the laboratory without the supervision of a teacher unless you have been specifically cleared to do so.
- Always perform the experiments or work precisely as directed by the teacher.
- Immediately report any spills, accidents, or injuries to a teacher.
- Never leave experiments while in progress.
- Be careful when handling hot glassware and apparatus in the laboratory. Hot glassware looks just like cold glassware.
- Never point the open end of a test tube containing a substance at yourself or others.
- 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, including lab coats and goggles.
- Coats, bags, and other personal items must be stored outside the door but not blocking the door
 or on your desk, 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

This explains how to keep your lab space clean and tidy.

- 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.
- Know where to dispose of the waste from each particular lab.
- Properly dispose of broken glassware and other sharp objects (e.g., syringe needles) immediately in designated containers.
- Properly dispose of gloves, filter paper, and paper towels in the laboratory.

Apparel in the Laboratory

This explains appropriate clothes for labs. Failure to adhere to these may mean you cannot participate in the lab.

- Always wear appropriate eye protection in the laboratory.
- Wear disposable gloves, as provided in the laboratory, when handling hazardous materials.
 Remove the gloves before exiting the laboratory and dispose of properly.
- Wear a full-length, long-sleeved laboratory coat, when directed to do so.
- Wear shoes that adequately cover the <u>whole foot</u>; 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, 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).
- 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

This explains how to keep your own body safe during and after a lab.

- 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 before leaving the laboratory and return them to their appropriate place. If equipment needs to be cleaned, please notify the teacher before leaving the lab.

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:
 - Fire extinguishers
 - o Alarm systems with pull stations
 - Fire blankets
 - Eye washes
 - o First-aid kits
 - o Deluge safety showers
- In case of an emergency or accident, follow the established emergency plan as explained by the teacher and evacuate the building via the nearest exit.

Chemical Handling

This refers to safety measures during each lab.

- 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.
- Unless specifically instructed, no student may remove chemicals from the lab or store room.

Finally...

These may seem like excessive rules but they are there for everyone's safety. If you are found breaking one of these rules, you may be asked to sit down, leave the lab or even leave the classroom. We will be doing exciting labs throughout the year. If you want to be a part of them, follow the above rules.