

# LABORATORY SAFETY

---

## **GENERAL SAFETY PRECAUTIONS:**

1. Approach laboratory work with maturity. Never run, push, or engage in horseplay or practical jokes of any kind in the laboratory.
2. Unauthorized experiments are prohibited. Do only those experiments assigned by your teacher.
3. Never work alone in a science laboratory, and never work without teacher supervision.
4. Never eat, drink, or chew gum in a science laboratory. Do not store food or beverages in a lab.
5. Never sit on lab tables, even if a lab is not in progress.
6. Wear protective eye goggles and aprons whenever performing experiments in the laboratory.
7. Restrain loose clothing (e.g. sleeves, full-cut shirts, etc.), long hair, and dangling jewelry.
8. Footwear should cover feet completely. No open-toe shoes.
9. Keep your apparatus and desk area clean. Store items not in use such as books and pencil cases out of the way in designated storage areas.
10. Keep chemicals, glassware, and other equipment away from the edge of the lab table.
11. Know the location and proper use of the first aid kit, fire blanket, fire extinguisher, safety shower, and eyewash fountain.
12. Know your lab group. Do any of your group members wear contacts or have a medical condition such as asthma or epilepsy? Know what to do in the case of an emergency.

## **SAFE PROCEDURES:**

1. Do not touch chemicals with your hands unless directed to do so. Wash your hands thoroughly before and after working in a science laboratory, and after spill cleanups.
2. Do not hold your face directly over an open container of chemicals. When observing the odor of a substance, fan the vapor toward you by sweeping your hand over the top of the container.
3. Never reach over an exposed flame or place flammable materials near a flame.
4. When heating a substance, never use a closed container. Always point the open end of the container away from yourself and others.
5. Never leave heat sources unattended. Turn off equipment when not in use.
6. Use tongs, test-tube holders, or potholders to handle hot laboratory equipment. Allow ample time for glassware to cool before handling. Remember, hot glass looks like cool glass.
7. Never touch electrical equipment with wet hands or place in an area that may be wet.
8. Never use broken or chipped glassware. Be sure all glassware is clean before you use it.
9. When diluting an acid, always add the acid to the water. "Do as you oughtta, add the acid to the watta."
10. Follow the directions from your teacher for the disposal of all chemicals.
11. Do not use the sink to discard matches, paper, or other solid or slightly soluble materials.

## **ACCIDENTS:**

1. Report any accident or injury, no matter how minor, to your teacher.
2. If a chemical spills on your skin or clothing, wash it off immediately with plenty of water.
3. If a chemical gets into your eyes or on your face, have someone help you to the eyewash fountain and wash with plenty of water. Contacts need to be removed immediately.
4. Clean up all spills immediately. Do not pick up broken glassware with your bare hands. Use a dustpan and brush and place broken glass in the designated container.
5. Smother small fires with a towel. Use the fire blanket to extinguish clothing fires. Only use the fire extinguisher on larger fires that do not involve people.
6. Use the safety shower to treat full-body chemical spills or fires.