



Lab Safety

General Rules

- **Be alert and responsible at all times in the laboratory.**
- **Follow all written and verbal instructions carefully. If you do not understand a direction or part of a procedure, ASK BEFORE PROCEEDING WITH THE ACTIVITY.**



General Rules

- **Never work alone in the laboratory. No student may work in the science classroom without the presence of the teacher.**
- **When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.**



General Rules

- Perform only those experiments authorized by your teacher. Carefully follow all instructions, both written and oral. Unauthorized experiments are not allowed.
- Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages.



General Rules

- **Be prepared for your work in the laboratory. Read all procedures thoroughly before entering the laboratory. Never fool around in the laboratory.**
- **Always work in a well-ventilated area.**



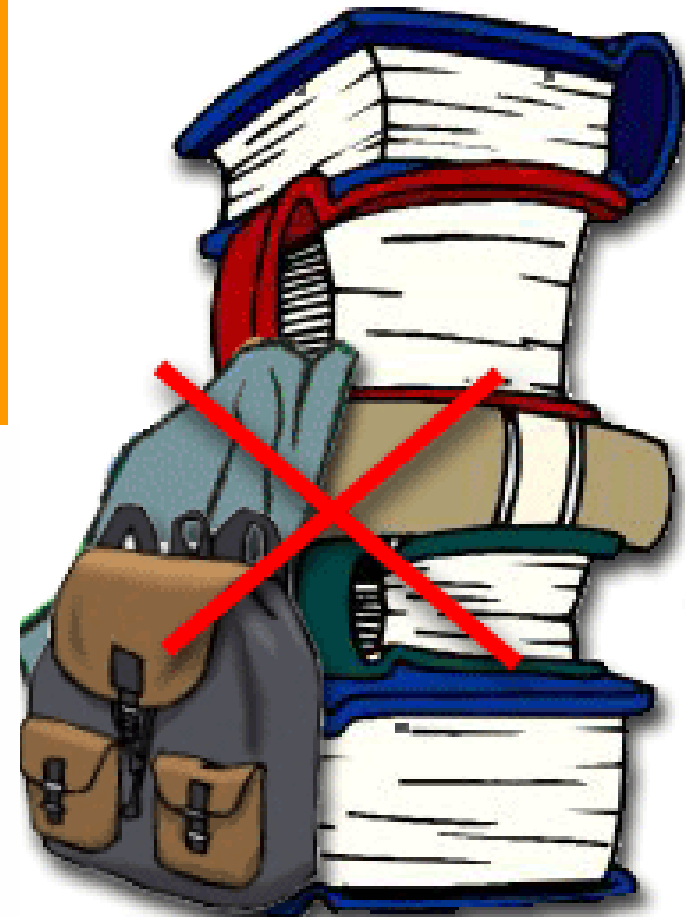
General Rules

- **Observe good housekeeping practices. Work areas should be kept clean and tidy at all times.**
- **Be alert and proceed with caution at all times in the laboratory. Notify the teacher immediately of any unsafe conditions you observe.**



General Rules

- **Dispose of all chemical waste properly. Never mix chemicals in sink drains. Sinks are to be used only for water. Check with your teacher for disposal of chemicals and solutions.**
- **Labels and equipment instructions must be read carefully before use. Set up and use the equipment as directed by your teacher.**



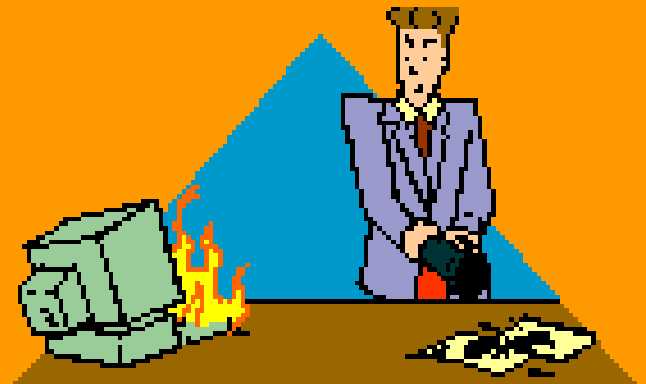
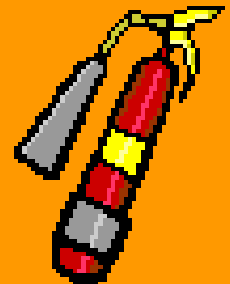
General Rules

- **Keep hands away from face, eyes, mouth, and body while using chemicals or lab equipment. Wash your hands with soap and water after performing all experiments.**
- **Experiments must be personally monitored at all times. Do not wander around the room, distract other students, startle other students, or interfere with the laboratory experiments of others.**



General Rules

- Know the locations and operating procedures of all safety equipment including: first aid kit(s), and fire extinguisher. Know where the fire alarm and the exits are located.
- Know what to do if there is a fire drill during a laboratory period; containers must be closed, and any electrical equipment turned off.

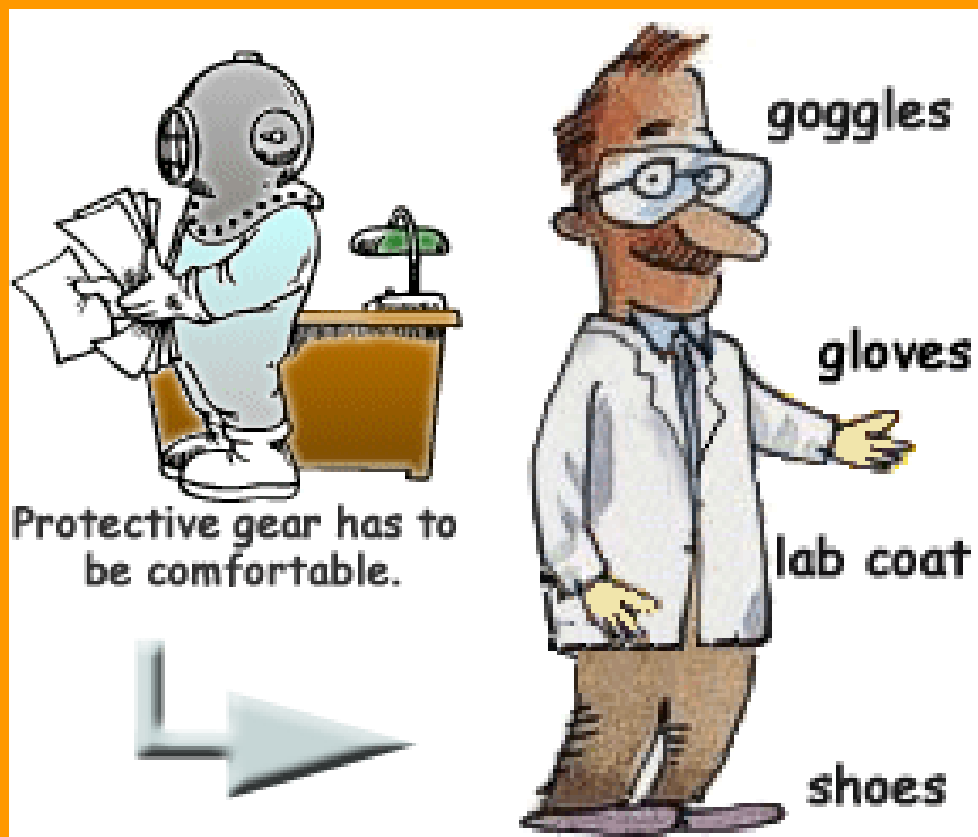


Glassware Safety

- Any time chemicals, heat, or glassware are used, students will wear safety goggles.

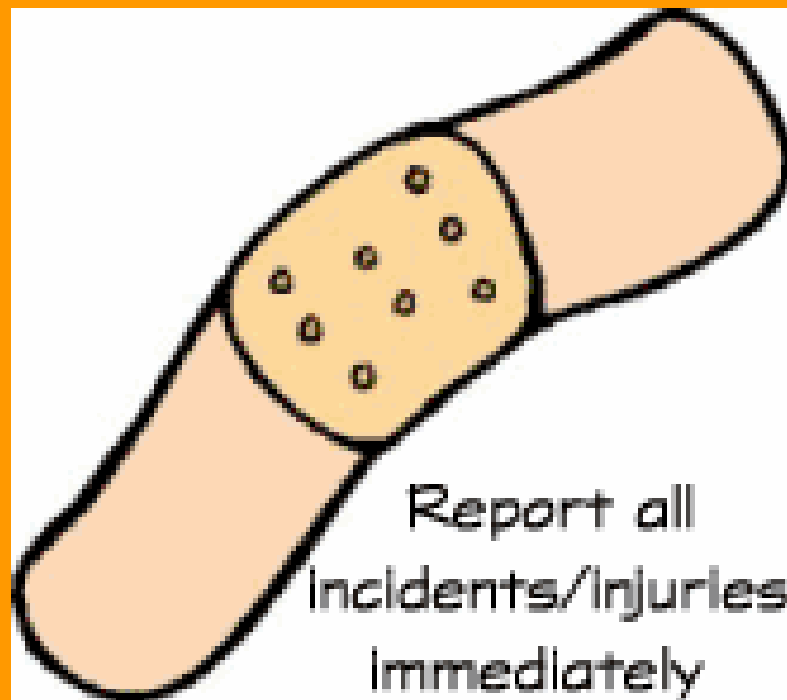
NO EXCEPTIONS TO THIS RULE!

- Dress properly during a laboratory activity. Long hair, dangling jewelry, and loose or baggy clothing are a hazard in the laboratory. Long hair must be tied back, and dangling jewelry and baggy clothing must be secured. Shoes must completely cover the foot. No sandals allowed on lab days.



Glassware Safety

- Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the teacher immediately, no matter how trivial it seems. Do not panic.
- If you or your lab partner is hurt, immediately (and loudly) yell out the teacher's name to get the teacher's attention. Do not panic.



Chemical Safety

- If a chemical should splash in your eye(s) or on your skin, immediately flush with running water for at least 20 minutes.
- Immediately (and loudly) yell out the teacher's name to get the teacher's attention.



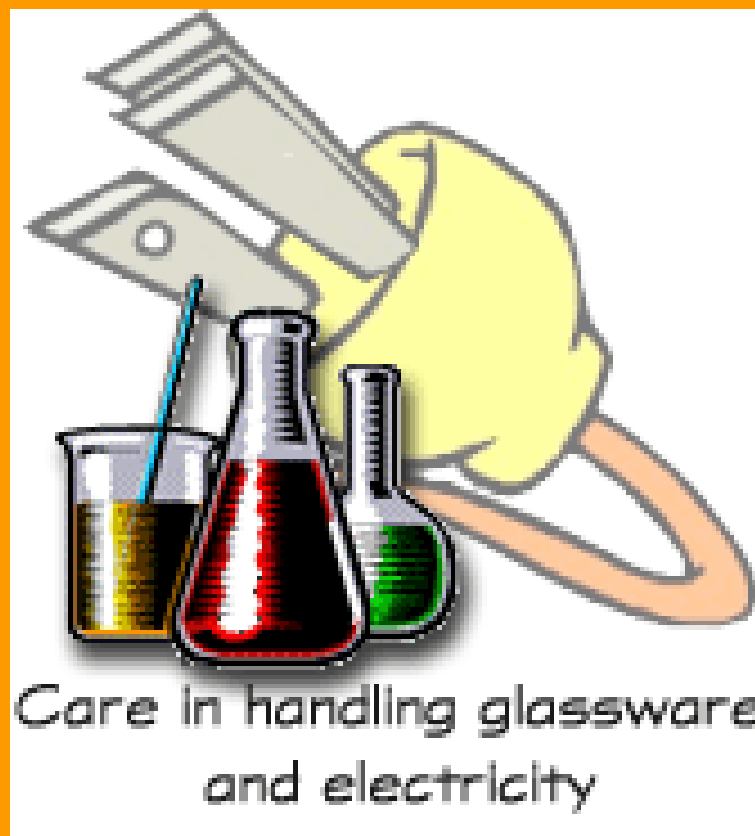
Chemical Safety

- All chemicals in the laboratory are to be considered dangerous. Avoid handling chemicals with fingers. Always use tweezers. When making an observation, keep at least 1 foot away from the specimen.
- Do not taste, or smell any chemicals. *If* the instructions ask you if a substance has an odor, hold the container away from you and gently fan the fumes using a wafting motion.
- Never put your nose into the container!



Chemical Safety

- Check the label on all chemical bottles twice before removing any of the contents. Take only as much chemical as you need.
- Never return unused chemicals to their original container
- Never remove chemicals or other materials from the laboratory area.



Glassware Safety

- **Never handle broken glass with your bare hands. Use a brush and dustpan to clean up broken glass.**
- **Place broken glass in the designated glass disposal container.**
- **Examine glassware before each use. Never use chipped, cracked, or dirty glassware.**



Heat & Electrical Safety

- Do not immerse hot glassware in cold water. The glassware may shatter.
- Do not operate a hot plate by yourself. Take care that hair, clothing, and hands are a safe distance from the hot plate at all times.
- Use of hot plate is only allowed in the presence of the teacher.



We want to avoid this.

Heat & Electrical Safety

- Heated glassware remain very hot for a long time. They should be set aside in a designated place to cool, and picked up with caution. Use tongs or heat protective gloves if necessary.
- Do not place hot apparatus directly on the laboratory desk. Always use an insulated pad. Allow plenty of time for hot apparatus to cool before touching it.



Animal Safety

- Occasionally you will encounter live animals in the science lab or outdoors while doing field work.
- Please be careful to keep from being bitten. If an animal bites you while in the lab or in the field, **INFORM** your teacher immediately!
- Remember that to handle animals is a privilege. Treat all live animals and preserved specimens that you encounter or handle with respect.



Lab Safety Symbols Found in your textbook

- Glassware



- Heat



- Eye and Face



- Sharps



- Electrical



- Animal



- Chemical



- Fire



Other Chemical Hazards and Symbols

- Flammable



- Irritant



- Explosive



- Corrosive



- Toxic/Poison



- Environmental



Lab Safety Equipment

Safety Shower



Eye Wash



Safety Goggles



Lab Safety Equipment

Fire

Extinguisher



Fire Blanket



Fume Hood

