



Calgary Board
of Education

James Fowler
High School



The Rules of Lab Safety

You are responsible
for your safety
and for the safety of those
around you.

Failure to act in a safe and responsible
manner will result in the removal of all
science lab privileges.



**Horseplay will
be dealt with
severely!**

Professor Glickman, the lab practical joker, deftly places a single drop of hydrochloric acid on the back of Professor Bingham's neck.

--Gary Larson, *the Far Side*

General Safety Precautions

- No horseplay. Be aware of others in the lab.
- No student should be in the lab or preparation room unsupervised.
- Be prepared for your lab. READ your procedure for any safety precautions.
- Do not eat, drink, or chew gum in the lab. Your food may pick up harmful chemicals.
- Never taste or directly inhale chemicals.



General Safety Precautions

- Do not sit on the lab benches.
- Students must stand while doing labs.
- Keep work area clean and free from clutter when performing experiments.
- No unauthorized experiments.
- Butane lighters, matches, and other flammable materials must not be brought to class.

Safety Equipment



- Know the locations of all safety equipment in the lab: fire extinguishers, eye wash station, first aid kit, fire exits, and fire alarms.
- Safety goggles must be worn for all experiments.

Safety Equipment (cont.)

- Dress appropriately during a lab activity. Long hair must be tied back, and dangling jewellery and baggy clothing must be secured. Shoes must completely cover the foot. No sandals allowed on lab days.
- Your teacher may require additional safety equipment, which must be worn.

Handling Chemicals



- All chemicals in the laboratory are to be considered dangerous. Do not allow chemicals to come in contact with skin or eyes. **Do not taste, or smell any chemicals.**
- Check the label on all chemical bottles twice before removing any of the contents. Take only as much chemical as you need.

Handling Chemicals (cont.)

- **Never** return unused chemicals to their original container.
- **No** chemicals go down the drain. Dispose of chemicals as instructed by your teacher.
- **Never** remove chemicals or other materials from the laboratory area.
- Look for WHMIS or HHPS symbols on containers.

Hazardous Household Product Symbols



CORROSIVE

Eats or wears away other materials.

EXPLOSIVE

Explodes or gives off deadly vapours.



FLAMMABLE

Ignites if exposed to heat or sparks.

POISONOUS

May cause sickness or death if swallowed.



WHMIS

Workplace Hazardous Materials Information System



Compressed
gas



Flammable and
combustible material



Oxidizing
material



Materials causing
immediate and
serious toxic effects



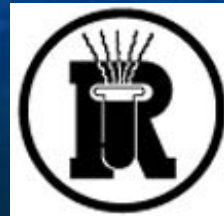
Materials causing
other toxic
effects



Biohazardous
infectious material



Corrosive
material



Dangerously reactive
material



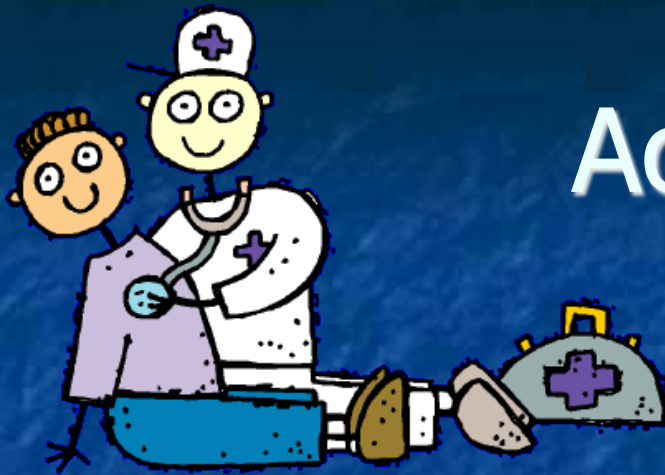
Handling Glassware

- Do not use cracked or chipped glassware.
- Broken glass should be reported to the teacher who will give instructions for safe clean up and disposal. There is a designated glass disposal container.
- Do not tightly stopper a flask where gas is being created. It could explode.
- Clean and return all glassware at the end of the lab.

Heating Substances

- Light a Bunsen burner as instructed by your teacher. Never leave a heat source unattended.
- Hot glass does not look hot! Handle recently heated glassware with tongs.
- Do not immerse hot glassware in cold water. The glassware may shatter.
- When heating a test tube, always point the test tube away from yourself and others. Never look into a container that is being heated.

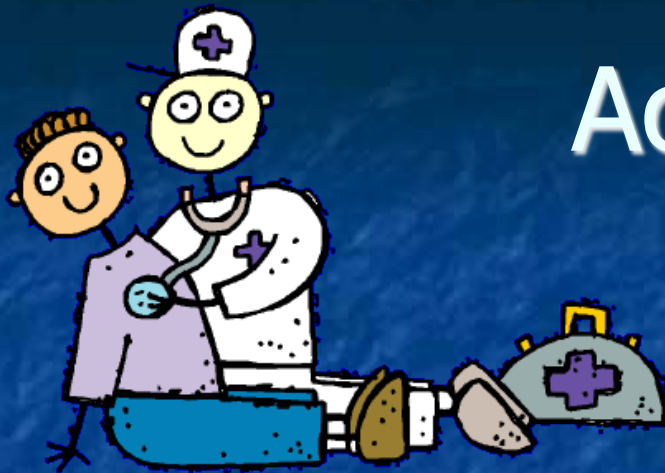




Accidents & Injuries

**Respond to emergencies
sensibly and immediately!**

- Report all accidents and injuries to the teacher at once, no matter how minor.
- If chemicals are spilled on skin rinse well with running water for as long as directed by your teacher.
- For a chemical splash in your eyes, rinse immediately at the eye wash station for at least 30 minutes. Hold eyelids open.



Accidents & Injuries

(cont.)

- If a chemical is spilled, inform a teacher immediately and follow directions for safe clean up.
- If a fire starts, inform a staff member immediately. Remember, if you are on fire, - put a fire blanket over yourself!

When the lab is done . .



- Clean all glassware and materials and put everything away according to instructions.
- Wipe the lab benches clean with paper towels.
- Disinfect safety goggles and return to designated storage.
- Wash your hands with soap and water.

IF YOU'RE NOT
SURE ABOUT
SOMETHING...

Ask your TEACHER!!!