

+ Lab Safety +

Everyone is Responsible!

- **"I didn't mean to"** and **"It wasn't my fault"** are two statements that have no place in the lab. If someone is hurt or equipment is broken, these statements cannot undo the harm.
- **Horse-play will not be tolerated.** If it occurs, those involved will be disqualified from the lab and given a zero for the assignment.
- **Lack of pre-lab preparation** is the main threat to safety in our lab. If you and your group are unprepared, you will be unsure of yourself, waste time, and have a good chance of making a mistake that leads to a problem.
- **At the beginning of each lab period,** you will be given a chance to ask questions. If you are unsure of some procedure, now is the time to ask. Always pay close attention to any verbal instructions given at this time.

Safety Glasses Must Be Worn in the lab area

Safety glasses are stored in the goggle holder in the center of the lab area.



Contact lenses should NOT be worn in the lab.

- It is almost impossible to remove contacts after chemicals have been splashed into the eyes.
- Chemicals trapped under contacts will damage the eye even more than normal.
- The plastic used for some types of contact lenses is permeable to vapors found in the laboratory. If these vapors are trapped behind the lens, extensive irritation may occur.

Long hair and bulky clothing are dangerous in the lab.

- There is a danger of catching fire, as well as being drawn through chemicals.
- Wear appropriate clothing.
- Tie back long hair.

Rings, watches, and jewelry are dangerous in the lab.

- Corrosive or irritating liquids may get underneath a ring or watch and produce irritation.
- Dangling jewelry may catch on a piece of labware and cause an accident.

Accidents Can Happen:

- **Remain calm!** A minor problem quickly becomes a major one if you don't.
- **Report all accidents immediately, no matter how small.**

Types of accidents and how to handle them:

Broken Glass: The most common accident in the lab, even with the best of care.

- If you are using the equipment properly, you will not get into trouble for breaking a piece of glassware.
- If you are not using the equipment properly, or if horse-play is involved, you will be required to pay for the broken glassware.
- **If glassware is broken, stop where you are.** Report the breakage to your teacher.
- **Do not move until your teacher says it is safe to do so.** There will most likely be many small slivers of glass that you do not immediately notice. If anyone is cut, report it immediately.
- **Your teacher will collect the broken glass, not you.** More minor cuts occur **after** this type of accident than during it.
- Chemical spills are often involved with glass breakage. When that occurs, follow those safety precautions too.

Cuts and Scrapes: Do not come into contact with another person's blood.

- **Report the situation to your teacher and let him help the injured person.**
- There is always a **possibility of infection**, even with the most minor injury. For this reason you should report **any** cut or scrape, even if there is no visible blood.
- If there is blood at **any** lab station, **everyone** is to turn off all burners and move to your seat in the classroom area until told it is safe to return to the lab.

Chemical Spills: You are to treat all chemical spills as DANGEROUS.

Stop where you are and let your teacher tell you what to do.

- Did any of the spill get on your skin or clothing? Sometimes adding water is the worst thing you can do.
- Depending on the chemical spilled, we might just have a mess to clean up or we might have a very dangerous situation.
- The most potentially dangerous chemicals used in our lab are corrosive acids and bases. Even though you will normally be using chemicals that have been diluted, you should always treat acids and bases with care.

Fire: When you are not heating something - turn the burner off.

- **Bunsen burners** are the source of most problems. They have very few malfunctions. If a malfunction occurs, turn off the gas and notify your teacher- end of problem. Be aware when a burner is in use at your lab station. Be extremely careful during that time.
- **Paper** is the most common type of fire in the lab. This type of fire is caused by carelessness and easily prevented. Take only one lab sheet to your station to follow your written procedures and record data. Leave all reference materials at your desk. If you need to refer to reference material, leave the lab area to do so. **If a paper fire occurs, push the paper into the lab sink and turn on the water** - end of problem.
- **Clothing or Hair** is the most dangerous type of fire in the lab. **Don't panic!** If you are the one involved in a fire - **stay where you are - help is coming.** "Stop, drop, and roll" is still the best course of action. If your partner is involved in a fire - **get the fire blanket.** Your teacher will be racing you to the blanket and **both of you** will help your partner smother the fire. If the fire is not at your lab station - **stay away !**