### Lab Safety

Holy Spirit High School CBS, NL

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# Why is Lab Safety Important?

- Lab safety is a major aspect of every lab based science class.
- Lab safety rules and symbols are needed so that students do not injure themselves or their classmates.

#### Lab Safety Rules

- 1. Always follow the teacher's directions and only do lab work when a teacher is present.
- 2. Conduct yourself in a responsible manner at all times. No Horseplay!
- 3. Do not touch any equipment, chemicals, or do other materials until told to do so.
- 4. Do not eat food, drink beverages, or chew gum in the lab. Do not use lab glassware as food or beverage containers
- 5. Report <u>ALL</u> accidents to your teacher immediately, even if you think it is minor.

### Clothing used when using chemicals

#### Wear:

- Goggles/safety glasses
- Closed-toed shoes
- Lab Coats
- Tie back long hair

#### Do NOT Wear:

- Sandals
- Jewelry
- Loose or Baggy clothing

### Lab Safety Equipment

Safety Shower

Eye Wash

Safety Goggles







### Lab Safety Equipment

Fire Extinguisher

Fire Blanket

Fume Hood







### **Chemical Hazards and Symbols**

Flammable





Irritant



Explosive





Corrosive





Toxic/Poison



Environmental



## Chemical Hazard Symbols and Definitions



Flammable – Any substance that will burn if exposed to an open flame.



Explosive – A substance that may explode if exposed to heat or flame.

## Chemical Hazard Symbols and Definitions



 Toxic/Poison – A substance that can lead to death if inhaled, ingested, or absorbed by the skin.



 Corrosive – A substance that can destroy or burn living tissue and can eat away at other materials.

## Chemical Hazard Symbols and Definitions



 Irritant - A substance that causes inflammation upon contact with skin or mucous membranes.



 Environmental - Substances that are harmful to the environment. They must be disposed of properly, not washed down the drain.

#### Accidents and Injuries

- Report <u>ALL</u> accidents and injuries to your teacher immediately!!!
- Be aware of safety hazards associated with each chemical you use.
- Eye accident Wash the eye with copious amounts of water for at least 15 min.
- Fire Burns Stop, Drop, and be covered with a fire blanket or soaked with water. Do not remove clothing stuck to victim. Get medical attention immediately.

### Waste Disposal

- First ask your teacher where/how to dispose of waste.
- Never pour anything down the drain unless you are told to do so.
- A waste bottle will be supplied for substance that cannot go down the drain



# Reasons for proper waste disposal

- Hazardous chemicals down the drain can lead to pollution of ground water, lakes, rivers, etc.
- Plants and animals will die if they are exposed to hazardous chemical waste.
- Serious health problems will become present in people if hazardous waste finds its way into drinking water.

#### Check List

- This clarifies that I have been instructed lab rules and the use of:
- Protective clothing
- Eye protection and eye wash device
- Fire safety, Extinguisher & Safety Blanket
- First Aid, MSDS and Waste Disposal

As a student I will abide by these rules and guidelines and follow instructions given by the teacher while in the laboratory and conduct myself in a responsible manner. Failure to do so will result in expulsion from the laboratory.

#### Student and Parent Statements

As a <u>student</u> I will abide by these rules and guidelines and follow instructions given by the teacher while in the laboratory and conduct myself in a responsible manner. Failure to do so will result in expulsion from the laboratory.

As a Parent/Guardian I consent for the child I care to engage in laboratory activities using the equipment and materials including those described in the above check list. I pledge my cooperation in urging that hr/she will observe the safety regulations described.