Chemistry

Lab Safety

 <u>Lab Techniques & Safety: Crash Course</u> <u>Chemistry #21 – YouTube</u>

• Create a list of lab safety rules

Activity: Science Lab Safety 1-1A (Science Text Page 9)



- <u>http://www.youtube.com/watch?v=ck4Dpu26</u> <u>Lug&list=PL31MGOv8BfY1XItUWYfCRPoacMN</u> <u>q4ZWj9&index=2</u>
- Read through the extensive rules for the science lab on page 10-11 of science textbook.

Textbook Questions (Page 11)

• Complete #1-5

WHMIS

What does it stand for?

- Workplace
- Hazardous
- Materials
- Information
- System

What information does WHMIS provide?

• Safety information about any hazardous substance that is manufactured and sold.

WHMIS Symbols



Flammable and Combustible Material



Oxidizing Material



Corrosive Material



Poisonous and Infectious Material Causing Immediate and Serious Toxic Effects



Poisonous and Infectious Material Causing Other Toxic Effects



Biohazardous Infectious Material



Material

A chemical container may have one or more symbols



Safety Hazard Symbol

- Each hazard symbol provides two kinds of warnings;
- Shape of Border determines whether the hazard is the container or its contents.
- Type of hazard explosive, corrosive, flammable, or poisonous, shown by image at the center of the symbol.

Border Shape

- Dangerous Container
- \bigtriangledown

• Dangerous Product

Hazards

This symbol means that the;

1. container can explode if it is punctured or heated.



2. product inside the container will burn the throat or stomach if swallowed and will burn skin or eyes on contact.



3. product will catch on fire easily if it is near sparks, flames, or even heat.

4. product will cause illness or death if you eat or drink it. For some products, just smelling or licking them is enough to cause serious harm.



Identify the warnings provided by each safety hazard symbol on the WD-40 container



Material Safety Data Sheets (MSDS)

- contains information about a substance
- chemical composition, handling procedures,
 first aid, long-term effects of exposure, disposal
 & clean up procedures.
- whether it is toilet bowl cleaner, film developer, or sweetener, all chemicals have an MSDS.

Assignments

- WHMIS
- MSDS

Homework Task

- Read article "Chemistry in a House Fire" Textbook page 14
- Locate at home smoke detectors (make sure they are working), carbon monoxide detector, and fire extinguisher.
- Escape Route Plan How will you get out of every room in your house (Note: Check windows to make sure they open and are not buried in with snow)

Lab Equipment

- <u>https://www.youtube.com/watch?v=_A3JxpM</u>
 <u>U63s</u>
- Worksheet Identifying lab equipment and their function in the lab.