

Unit 1 – Introduction

Lesson 1 – Lab Safety

Learning Outcomes

- I can describe the location and use of all of the safety equipment in the science classroom.
- I can describe how to act safely in the science classroom.

Behaviour

- Listen to or read instructions carefully before attempting to do anything.
- Notify your teacher if any spills or accidents occur.
- After handling chemicals always wash your hands with soap and water.
- During lab work, keep your hands away from your face.
- Tie back long hair.
- Take off baggy clothing and roll up loose sleeves.
- Keep your work area uncluttered. Take to the lab station only what is necessary.
- Never put anything into your mouth during a lab experiment.
- Clean up your lab area at the conclusion of the laboratory period.
- Never “horse around” or play practical jokes in the laboratory.

Eye Safety

- always wear safety glasses or goggles during lab activities
- prescription glasses are not safety glasses
- if an eye splash does occur, flush out the eye with an eye wash for a minimum of 15 minutes or until the eye feels better
- caustics (bases) are worse than acids because tears are slightly basic already and will help to neutralize an acid

Fire Safety

- 3 requirements for any fire – fuel, oxygen and heat
 - called the fire triangle
- sand bucket – used to smother small fires
- fire blanket – used to smother clothing that is on fire
- fire extinguisher – used to extinguish large fires
 - to use:
 - P – pull pin
 - A – aim at base of fire
 - S – squeeze handle
 - S – sweep back and forth
 - extinguisher type matches the fuel source

Class & Name	Example of Fuel	Contents
A – Ordinary Combustibles	wood, paper, fabrics	water
B – Flammable Liquids	gasoline, grease, oils, paints	dry chemical or foam
C – Electrical	electrical appliances	CO2 or dry chemical
D – Combustible Metals	magnesium, lithium, potassium	dry powder – specific to metal

- higher level extinguisher can be used on a lower level fire
- ABC (multiclass) extinguishers are the most common type
- gas shut off valve – turn off if fire during a lab using gas

Acid/Base Spills

- used to neutralize an acid or base spill before cleaning it up
- add the opposite until the spill is neutralized (test with pH indicator)

Fume Hood

- used to vent out noxious smelling fumes

Sharps Bucket

- dispose of all sharps such as broken glass and scalpel blades