Lab Safety

8TH GRADE – RE-TEACH OF LAB SAFETY EXPECTATIONS
Intro Video:

Lab Techniques and Safety (video)
Science Safety & Safety Symbols
• Science Safety is thinking before you do something
Most Important Safety Rules

- Listen to the teacher
- Read the directions (2 times)
- Wear protective clothing
  - Goggles $\rightarrow$ protect the eyes from chemicals or glass
  - Gloves $\rightarrow$ protect the hands
  - Lab coats $\rightarrow$ protect the skin and clothes
General Safety Rules

• Follow all instructions carefully.

• Be Responsible at All Times.
  - No horseplay or being silly during labs

• Do not touch the lab equipment until instructed to do so.
• Be aware of unseen dangers – sharp objects, clear liquids, etc.
• Food, drink, and gum are not allowed in the science classroom.

Lab Safety: Everyone Is Responsible!
Protective Gear:

- Wear goggles when working with glass or chemicals to protect your eyes.
- Tie hair back to keep it out of chemicals.
- Wear closed-toe shoes.
- Wear lab coat or apron to protect from spills.
- Wear gloves to protect from chemicals.
- Wash hands after EVERY lab!
What’s Wrong With This Picture?

Eye-wash Station
What’s Wrong With This Picture?
What’s Wrong With This Picture?
Stay SAFE in the Science Classroom or Lab
Safety Symbols

These symbols warn of possible dangers in the laboratory and remind you to work carefully.

**Safety Goggles** Wear safety goggles to protect your eyes in any activity involving chemicals, flames or heating, or glassware.

**Lab Apron** Wear a laboratory apron to protect your skin and clothing from damage.

**Breakage** Handle breakable materials, such as glassware, with care. Do not touch broken glassware.

**Heat-Resistant Gloves** Use an oven mitt or other hand protection when handling hot materials such as hot plates or hot glassware.

**Plastic Gloves** Wear disposable plastic gloves when working with harmful chemicals and organisms. Keep your hands away from your face, and dispose of the gloves according to your teacher’s instructions.

**Heating** Use a damp cloth or tongs to pick up hot glassware. Do not touch hot objects with your bare hands.

**Flames** Before you work with flames, tie back loose hair and clothing. Follow instructions from your teacher about lighting and extinguishing flames.

**No Flames** When using flammable

**Fumes** Work in a ventilated area when harmful vapors may be involved. Avoid inhaling vapors directly. Only test an odor when directed to do so by your teacher, and use a wafting motion to direct the vapor toward your nose.

**Sharp Object** Scissors, scalpels, knives, needles, pins, and tacks can cut your skin. Always direct a sharp edge or point away from yourself and others.

**Animal Safety** Treat live or preserved animals or animal parts with care to avoid harming the animals or yourself. Wash your hands when you are finished with the activity.

**Plant Safety** Handle plants only as directed by your teacher. If you are allergic to certain plants, tell your teacher; do not do an activity involving those plants. Avoid touching harmful plants such as poison ivy. Wash your hands when you are finished with the activity.

**Electric Shock** To avoid electric shock, never use electrical equipment around water, or when the equipment is wet or your hands are wet. Be sure cords are untangled and cannot trip anyone. Unplug equipment not in use.

**Physical Safety** When an experiment involves physical activity, avoid injuring yourself or others. Alert your teacher if there is any reason you should not participate.

**Disposal** Dispose of chemicals and other laboratory materials safely. Follow the instructions from your teacher.
Safety Symbols and Contract

▶ Know the safety symbols and turn in the safety contract when due!

▶ On the safety contract now: Print your name on the front page!

Science Classroom Student Safety Contract

The following standard procedures will apply to the science lab classes at Meridian World School. Students must adhere to these rules and practice acceptable behavior to make this area safe for all students.

Safety Rules:

1. Students may not work in the science lab without a science teacher present.
2. Do not handle equipment and supplies set up in the lab until given instruction to do so from the science teacher.
3. Eye protection, gloves, and a lab apron must be worn when required by the science teacher.
4. No eating or drinking is permitted during science labs unless a consumable is part of a lab procedure and the science teacher gives permission to eat the consumable.
5. No unauthorized experimentation is allowed. Follow lab procedures carefully and accurately. Do not proceed with any experiment if you do not understand the procedure.
6. Clean up spills promptly. If you have a question on spill cleanup, ask the science teacher.
7. If glass breaks, notify the teacher immediately. Clean up broken glass using a broom and dustpan and dispose of in the proper container, not the wastebasket.
8. Students must clean the work area and wash hands thoroughly before leaving the room.
9. Report all injuries, no matter how minor, to the teacher. The teacher will give guidance on the treatment needed and direct the student to the nurse's office, if needed.

Response to student violations of rules:

Depending on the severity of the incident, the teacher may respond by taking any of the following actions:

- Verbal warning from teacher, online record is kept of the infraction.
- Review of rule involved; parent and student sign agreement that the rule is understood and will be followed.
- Removal from class for the duration of the class period and parent is contacted.
- Discipline referral, parent contacted, and administration determines further consequences.

We have read, understand, and agree to the safety rules as written in this document.

Student name: ___________________________ Signature: ___________________________

Parent name: ___________________________ Signature: ___________________________
HW: Online safety tutorial

- Link is posted on my website
To work on:

Laboratory Safety Rules

Directions: Read the following story and underline/highlight all lab safety violations.

The bell rang, students sat in their seats, and they began to write down their homework. Ryan eagerly asked Mr. Jones, “What are we doing today?”

Mr. Jones impatiently said, “As always, Ryan it is listed on the board under AGENDA.”

Ryan responded, “Oh yeah, there it is, we have a Chemistry lab.”

Mr. Jones gave the class a brief overview of what they would be doing during the lab and he stressed to the class, “Please be sure to follow appropriate lab safety procedures.”

Ryan and John sprinted to a lab station, yelling, “We got this station!” Once at the station, Ryan asked John if he read the lab last night for homework to which John replied, “Nope, did you?”

Ryan responded to John’s question by saying, “Are you serious, I never read anything for this class.” They both looked at each other and decided to just start the lab.

“Ryan, you go get the chemicals and I’ll light up the Bunsen burner,” said John. Even though all of their classmates went to the safety goggles cabinet prior to starting the lab, Ryan and John decided not to go. John said in a smug way, “Forget the goggles; we are too cool to wear those things.”

Ryan walked up to the front lab bench where the chemicals were, removed the lids, picked up the flasks, and started to smell the different chemicals. “I am just going to bring back the ones that smell the best,” said Ryan. Little did Ryan know that one of the chemicals was sulfuric acid, and after taking a deep breath, he thought that his nose hairs were on fire.

“Hey Ryan, you didn’t even put the lid back on,” yelled Mr. Jones. Ryan ignored Mr. Jones and somehow he made it back to his lab station without passing out. Upon making his way back to the lab station, Ryan saw John trying to light the Bunsen burner.