**Laboratory Safety**

***Safety Rules***

1. Report any accident, injury, or incorrect procedure to your teacher immediately.
2. Perform experiments only under the direction of your teacher.
3. Be protected against spills and accidents. Wear safety goggles until everyone has finished cleaning his/her station. Please do not wear contact lenses or loose clothing. Wear shoes that cover your feet. Tie back long hair.
4. Never touch or ingest any chemical substance or eat or drink anything in the lab. Do not hold your face directly over a container.
5. Avoid potential dangers. Keep combustible materials (including alcohol and acetone) away from open flames. Handle toxic or combustible gases under a fume hood.
6. Know the location of first aid equipment, fire alarm, phone, and the school nurse’s office.

***Safe Lab Routines***

**Be prepared**

1. Study your lab assignment before you come to the lab. If you are in doubt about any procedure, ask your teacher for help.
2. Know your chemicals. Check the MSDS (Material Safety Data Sheets).

**Heat Safety**

1. When lighting a Bunsen burner, first light the match and bring to the outer top edge of the burner barrel, then slowly turn on the gas.
2. Do not heat heavy or thick glassware such as volumetric flasks, graduated cylinders, or bottles. Evaporating dishes and crucibles may be heated red hot.
3. Avoid heating any apparatus too suddenly. Apply the flame intermittently at first. Even Pyrex test tubes and evaporating dishes may break if they are heated above the liquid level, too quickly, or unevenly.
4. Keep moving the object being heated above a flame.
5. Hold test tubes being heated at an angle and be careful not to point the opening at anyone.
6. Never leave a flame unattended. If you must leave your station, turn the burner off.

**Handle chemicals and equipment carefully**

1. Chemicals must be in labeled containers at all times. Check the label (twice) of all containers before removing the contents.
2. Do not carry reagent containers to your station. Instead, bring test tubes, beakers, etc., to the supply table.
3. Do not return unused chemicals to reagent bottles or insert your own pipet or dropper into the stock bottle (one will be provided if needed).
4. To note odor, sweep your hand over the container to gently fan a little vapor to your nose.
5. I chemicals spill, notify the teacher immediately.
6. Do not lay the stopper of a bottle on the counter. Instead, hold the stopper while pouring from the bottle.
7. Add acids slowly to water, never the reverse.

**Emergency procedures**

1. **Fire.** Get the teacher’s attention and wrap the person in the fire blanket. Never run. Extinguish all flames.
2. **Eyes.** If a substance splashes in your eye, rinse it continuously at the eye wash station.

**Dispose of material properly**

1. Discard solids in the trash can. Never throw or set matches, litmus paper, or any insoluble solid in a sink.
2. Wash soluble liquids down the sink with large amounts of water.
3. Use provided waste containers for liquids that should not be washed down the drain.
4. Clean up broken glass and place it in the designated container.

**Clean Up**

1. Turn off gas and water.
2. Return all materials and equipment to the proper place.
3. Clean you work area completely.
4. Return your goggles.
5. ***Wash your hands with soap and water.***