

SCIENCE DEPARTMENT

LABORATORY SAFETY GUIDELINES FOR CHEMISTRY STUDENTS

1. **Always** conduct yourself in a business-like and responsible manner at all times and maintain an orderly clean lab desk.
2. Follow all written and verbal instructions carefully. If you do not understand a direction or a procedure, ask the instructor before proceeding.
3. Wear protective clothing (goggles and lab apron) at all times in the lab when working with chemicals or dissecting.
4. Always keep your hands away from your face, eyes, mouth and body while using chemicals or preserved specimens.
5. **Always** report all spills or accidents, no matter how minor to your instructor.
 - i) If chemicals get into the eyes, use the faucet at the eye wash station and flush the eyes for **15 minutes**.
 - ii) If corrosive liquids touch the skin, flood with water for at least **15 minutes**.
 - iii) For spills over larger areas of the body, you should use the safety shower. (to activate, pull ring).
 - iv) If a student should catch on fire, never run, never panic. The accepted procedure is to "**stop, drop and roll**". A fire blanket can also be used to smother the flames.
 - v) Burns should be treated with cool water and never ice.
6. If you or your lab partner are hurt, immediately get the attention of the instructor.
7. Know the location of the laboratory fire extinguisher, eyewash station, fire blanket, sand bucket, and safety shower.
8. Know the location of the first aid kit. This is in the clinic which is located in the same hall as the discipline office.
9. **Do not** wear sweaters or shirts with baggy sleeves in the lab. No open toed shoes during a chemistry lab. During some chemical activities, contact lens should be removed. Your teacher will notify you before these experiments.

NOTE ! The clinic has different types of contact lens solution. If at any time during a lab session your contact lens need cleaning, please notify the teacher.

10. Students with long hair should tie it back before starting any experiment.
11. For the safety of the whole class, unauthorized experiments are prohibited. Never work alone in the lab without an instructor
12. **Never** sit on a stool during a laboratory experiment.
13. **Do not** sit on the lab counter tops or tables. They may contain spilled chemicals that will destroy your clothes and may burn your skin.
14. **Do not** point your test tube at anyone or yourself when heating substances. A suddenly formed bubble of vapor may eject the contents violently (called bumping).
15. **Do not** hold your face directly over a container when noting the odor. Instead, fan a little of the vapor toward your nostrils by sweeping your hand over the container (called wafting).
16. **Never** taste a chemical or solution in the lab. (Poisonous substances are not always so labeled in the laboratory).
17. **Beware** of hot glass tubing. It looks cool long before it may be safe to handle
18. To insert glass tubing (including thermometers) through a rubber stopper, first, lubricate the tube and stopper with water (unless moisture must be avoided).Next hold the tube with a cloth, near the end to be inserted, and carefully insert with a twisting motion.
19. For chemical reactions involving the release of poisonous gases, always use the hood (which provides suction to remove such gases or vapors).
20. When diluting acids. Always add **acid to water**. This reaction always liberates a lot of heat in solution and could be explosive.
21. **Always** read the labels of reagent bottles carefully before using. Label all glassware

- properly.
22. **Never** return unused chemicals to the stock bottle. You may make a mistake from which other students' experiments will suffer.
 23. **Do not** lay the stopper of a bottle down on the lab counter. Impurities may be picked up and thus contaminate the solution.
 24. Only heat substances in glassware that has a "Pyrex" or " Kimax" label. This glass has been designed to withstand heat and not break.
 25. **Do not** place any objects into the electrical outlets.
 26. The gas jets should always be in the "off" position. **NOTE !** The handle must be at right angle to the jet tip. Failure to do so may result in severe punishments.
 27. **Always** place broken glassware and chemicals in the square metal containers. Not in the trash cans for paper.
 28. **Always** discard of solids into the appropriate trash cans. Never throw matches, litmus paper or any insoluble materials into the sinks. These materials could block the drain.
 29. Students with medical conditions that could be affected by chemicals in the laboratory should inform their instructors, as special precautions will be necessary.
 30. In the case of chemical spills, cover the area completely with sand or " kitty litter".
 31. Students are not permitted in the Science storage areas unless given permission by their instructor.
 32. At the end of a laboratory session, always wash all equipment carefully:
 - Invert glassware over a sheet of paper towel to dry.
 - Wipe down all the working surfaces (table tops and counter tops).
 - Wash your hands carefully and finally remove your protective clothing.

Adapted from Flinn Scientific's Student Safety Contract 1996

To the Student : Please read and study the above safety guidelines to ensure your safety in the Chemistry lab.

Sign below to indicate your willingness to comply and also ask your parents to sign to show their support.

Name of Student _____

Name of Parent / Guardian _____