



## Laboratory Safety Rules Chemistry @ SHS

### General Guidelines

1. Conduct yourself in a mature, responsible manner at all times in the laboratory. Always think about what you are doing. Do not talk about social events in the lab – they distract you from your work.
2. No food, beverages, or gum in the classroom or laboratory. I am responsible for your health.
3. Follow the lab instructions one step at a time. Do not go into the lab without first reading the complete lab instructions.
4. Do not work alone unless Mr. Harshman permits you to do so.
5. Do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
6. Perform only those experiments authorized by Mr. Harshman. Never do anything in the laboratory that is not called for in the laboratory procedures. Carefully follow all instructions, both written and oral. Unauthorized experiments are prohibited.
7. Be prepared for your work in the laboratory. Read all procedures thoroughly before entering the laboratory. Never fool around in the laboratory. Horseplay, practical jokes, and pranks are dangerous and prohibited – and will cause your removal from the laboratory with a zero on your lab.
8. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times. Bring only your laboratory journal that includes your pre-lab, lab instructions, worksheets, and/or reports to the work area. Other materials should be left up front in the classroom area.
9. Do not sit down in the lab. If a chemical spill occurs you want to be able to move quickly. Push your stool under the desk so as to keep aisles clear when conducting experiments.
10. Know the locations and operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, fire extinguisher, and fire blanket. Know where the fire alarm and the exits are located.
11. Notify the instructor immediately if you should observe any unsafe conditions.
12. Dispose of all chemical waste properly. Never mix chemicals in sink drains. Sinks are to be used only for water and those solutions designed by the instructor. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in the proper waste containers, not in the sink. Check the label of all waste containers twice before adding your chemical waste to the container.
13. Labels and equipment instructions must be read carefully before use. Set up and the prescribed apparatus as directed in the laboratory instructions or by your instructor.
14. Keep hands away from face, eyes, mouth and body while using chemicals. Wash your hands with soap and water after performing all experiments. Clean (with detergent), rinse, and wipe dry all work surfaces (including the sink) and apparatus at the end of the experiment. Return all equipment clean and in work order to the proper storage area.
15. Experiments must be personally monitored at all times. You will be assigned a laboratory group and station at which to work. Do not wander around the room, distract other students, or interfere with the laboratory experiments of others. When you complete an experiment and have all your stamps, leave the lab area and proceed to your desk.
16. Students are never permitted in the chemical storage cabinet unless given specific permission by their instructor. If you need more chemicals request them from the instructor.
17. Know what to do if there is a fire drill during a lab. All containers must be closed, gas valves turned off, fume hoods turned off, and any electrical equipment turned off.
18. When doing a lab always get stamps from the instructor as required. Do not progress on during an experiment until you have your stamp or you will have points deducted from your lab grade.
19. When using knives and other sharp instruments, always carry with tips and points pointing down and away. Always cut away from your body. Never try to catch falling sharp instruments. Grasp sharp instruments only by the handles.

### Lab Dress

20. No hats allowed in the classroom or the laboratory. (No hats are allowed in any classroom at SHS.)
21. Lab aprons are to be worn at all times while in the laboratory. Shoes must completely cover the foot. Not sandals or other open shoes allowed since falling objects and/or chemicals can damage exposed flesh. This isn't the beach – I wish it was!
22. Students will wear laboratory goggles at all times while in the laboratory. No sunglasses are allowed. Prescription glasses are permitted.
23. Contact lenses should not be worn in the laboratory unless you have permission from your instructor.

24. Dress properly during a laboratory activity. Shoes that cover the entire feet are required. Long hair, dangling jewelry (bling), and loose or baggy clothing are a hazard in the laboratory. Long hair must be tied back and dangling jewelry (bling) or baggy clothing must be secured. Bare midriffs are a hazard. So shirts that will not stay tucked in must be covered with an additional shirt that will cover them completely.

#### **Accidents and Injuries**

25. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to Mr. Harshman immediately, no matter how trivial it may appear.
26. If you or your lab partner are hurt, immediately get the instructor's attention.
27. If a chemical should splash in your eye(s) or on your skin, immediately flush with running water from the eyewash stations or safety shower for at least 20 minutes. Notify the instructor immediately.
28. Do not attempt to pick up broken glass or spilled chemicals with your hands.

#### **Handling Chemicals**

29. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemicals unless specifically instructed to do so. The proper technique for smelling chemical fumes will be demonstrated to you.
30. Check the label on chemical bottles twice before removing any of the contents. Take only as much chemical as you need.
31. Never return unused chemicals to their original containers. Dispose of them in the proper trash receptacle.
32. Use a spatula when removing chemicals from a container. Always rinse and dry the spatula before using it with another chemical.
33. When transferring chemicals from one container to another, hold the containers away from your body.
34. Immediately replace the top back on the container once you have removed a sample from it. Chemical containers without tops can become contaminated and spill out if accidentally knocked over.
35. Never remove chemicals or other materials from the laboratory area.
36. Take great care when transferring chemicals from one part of the laboratory to another. Hold them securely and walk carefully.

#### **Handling Glassware and Equipment**

37. Take care of your lab cabinet only that equipment you need to conduct the experiment.
38. Carry long glass tubing and burets directly in front of you in a vertical position to minimize the likelihood of breaking and injury.
39. Never handle broken glass with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.
40. Fill wash bottles only with distilled water and use only as intended, e.g., rinsing glassware and equipment, or adding water to a container.
41. When removing an electrical plug from its socket, grasp the plug, not the electrical cord. Hands must be completely dry before touching an electrical switch, plug, or outlet.
42. Always place glassware near the center of the lab tables where it is less likely to be accidentally knocked over.
43. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.
44. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
45. If you do not understand how to use a piece of equipment, ask the instructor for help.
46. Do not immerse hot glassware in cold water; it may shatter.

***I have studied and understand the lab rules. I agree to abide by all of these rules while in the classroom and the laboratory.***

Print Student Name: \_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent Signature: \_\_\_\_\_