

Lab Safety Commandments

1. If you are not sure, ask your teacher.
2. Absolutely NO horseplay of any kind is allowed in the lab.
3. Wear chemical safety goggles and chemical-resistant apron at all times while you are in the lab. They must be worn to cover your eyes and your body.
4. Shoes that cover entire feet (NO sandals, high-heels, platform shoes) must be worn in the lab. Avoid wearing overly bulky or loose-fitting clothing. Remove any dangling jewelry.
5. Long hair must be tied back to prevent catching fire from the Bunsen burner flame. Hair burns very readily. This is especially with hairspray. Roll up loose sleeves when working with flames. DO NOT leave a lighted burner unattended.
6. Be sure you have a lighted match before turning on your Bunsen burner.
7. If a Bunsen burner goes out, turn the gas off immediately.
8. When heating a liquid in a test tube, turn the mouth of the test tube away from yourself and others.
9. Use a hot plate instead of an open flame when a flammable liquid (most organic compounds) is present.
10. NEVER heat a closed system.
11. Conduct only assigned experiments, and do them only when your teacher is present. NEVER work in a laboratory alone.
12. Read all of the directions for a laboratory procedure before proceeding with the first part of the lab. Reread each instruction before you do it.
13. Know the locations of safety equipment such as eyewash fountains and bottles, fire extinguishers, emergency shower, and fire blanket, first aid kits, fume hood, emergency gas cut-off. Be sure you know how to use the equipment.
14. Wash your hands with soap and water at the end of each lab.
15. If chemical substances get in your eye, wash the eye out for 15 minutes with warm water. Hold your eye open with your fingers while washing it out.
16. Wash acid, base, or any chemical spill off of yourself immediately with large amounts of water. Notify your teacher of the spill.
17. If you burn yourself on a hot object, immediately hold the burned area under cold water for 15 minutes. Inform your teacher. Do NOT try to pop the blister.
18. Report all accidents, no matter how slight, to the teacher immediately.
19. NEVER eat or drink, or chew gum in the lab. Don't chew on the end of a pen which was lying on the lab bench.
20. NEVER taste any chemicals.
21. NEVER smell anything in the lab unless your teacher tells you it is safe. Do NOT smell a substance by putting your nose directly over the container and inhaling. Instead, waft the vapours toward your nose by gently fanning the vapours toward yourself.
22. Clean up spills immediately. If you spill a very reactive substance such as an acid or base, notify the people in the area and then obtain assistance from your teacher. Acid spills should be neutralized with baking soda, base spills with vinegar before cleaning them up.

23. Do NOT use chipped or cracked glassware. Clean up broken glass immediately. Use a brush or a thick pad of paper towels. All broken or cracked glassware goes into a special waste container for broken glass. Do NOT mix glass with other waste.
24. Keep the lab bench, sink, storage areas and floor clean, dry and neat clean during and at the end of the lab.
25. Read the label on a reagent bottle carefully *before* using the chemical. After removing the chemical from the bottle, check to measure that it is correct chemical for the procedure. All chemical safety sheets (MSDS – Material Safety Data Sheets) are categorized. Use them during an emergency.
26. To avoid contamination, do NOT return unused chemicals to a reagent or stock bottle. Similarly, never put a pipet, spatula, or dropper into a reagent bottle. Instead, pour some of the reagent into a small clean beaker and use that as your own supply.
27. If you take more of a chemical substance from a container than you need, you should not return the excess to the container. This might cause contamination of the substance remaining. Most chemicals should be disposed in the waste containers set up in the fume hood. Only pour chemicals down the sink when you are instructed to do so.
28. When diluting an acid, *always* pour acid slowly into water, stirring to dissipate the heat generated.
CAUTION: *Never pour water into a concentrated acid.*
29. Put lids or caps back on bottles and jars.
30. Again, if in doubt, ask your teacher!