

Scientific Skills
Laboratory Safety Rules
(Chapter 1 Section 4 and Appendix A)

In order to prepare you to work safely in the laboratory, read the following safety rules.
Make sure you understand and follow each rule.

SAFETY FIRST!

General Precautions

1. Read all the directions before beginning the activity. Carefully follow all written and oral instructions. Make sure you understand the directions. If you have questions, ask your teacher.
2. Never handle equipment without permission. Do not “experiment” on your own.
3. Never perform laboratory activities without supervision.
4. Do not eat, drink, or chew gum in a laboratory.
5. Keep work areas clean and uncluttered.
6. Do not engage in horseplay.

Dress Code

1. Wear safety goggles to protect your eyes.
2. Wear an apron or coat when working with corrosive chemicals or substances that stain.
3. Wear gloves when handling harmful substances.
4. Tie back long hair. Secure or remove articles of clothing or jewelry that hang down.
5. Never wear open toed shoes or sandals.

First Aid

1. Always report accidents or injuries to your teacher, no matter how minor.
2. Be aware of the location of the first aid kit and emergency equipment (fire extinguisher, fire blanket, electric shutoff).
3. Know the location of the nearest telephone and whom to contact in an emergency.

Heat and Fire Safety

1. Never heat anything unless instructed to do so. Certain glass containers are not heat resistant. (PYREX, BOMEX, KIMAX, and TEKK are safe.) Some chemicals are harmful when heated.
2. Keep all combustible materials away from flames.
3. Never reach or lean across a flame.
4. Know the procedure for using a laboratory burner.
5. Use a clamp, tongs, heavy glove, or “hot hand” to handle hot objects.
6. Never heat anything in a closed container.
7. Allow microscope lamps and hot plates time to cool off before putting them away.

Glassware Safety

1. Check glassware for chips or cracks. Do not use damaged glassware.
2. Do not pick up glassware unless you are sure it is not hot.
3. Always keep glassware away from the edges of the table.
4. Clean laboratory glassware thoroughly before putting it away.
5. Never eat or drink from glassware.

Sharp Instrument Safety

1. Handle sharp instruments with extreme care.
2. Never cut toward yourself. Cut so that the blade moves away from you and from others.
3. Do NOT pick up broken glass with your bare hands. Use the brush and dustpan.
4. If you are cut in the lab, tell the teacher immediately.

Name _____ Class _____ Date _____

Chemical Safety

1. Double check the labels on chemical bottles. Take only the amount you need. Keep all lids closed when chemicals are not in use.
2. Never mix chemicals together unless instructed to do so by the teacher, or by the directions. Make sure you understand the instructions.
3. Never smell a chemical directly from its container. Instead, use your hand to **waft** some of the vapors from the container (or from the lid) toward your nose.
4. Never taste any chemical. No eating, drinking, or chewing gum is allowed in class.
5. Stand up when pouring chemicals to avoid spilling chemicals into your lap. Pour over the sink or container.
6. If a chemical spills on you, wash it off with lots of water. Then, tell your teacher.
7. If a chemical splashes in your eyes, get you partners to help you to the sink or eyewash station and tell the teacher.
8. Always maintain a clean work area. Move extra papers and books out of the way.
9. Dispose of "used" chemicals in the proper manner. Do not pour them back into their original containers. Do not pour them down the drain or into the trash, unless directed by your teacher.

Electrical Safety

1. Do not touch an electrical device with wet hands.
2. Inspect cords and plugs to make sure they are not damaged.
3. Know the location of the emergency electrical shutoff.
4. Do not place electrical cords across the aisles.

Outdoor Safety

1. Wear clothing appropriate for the weather and activity.
2. Wear long pants to protect yourself from thorns and nettles. Check yourself for ticks.
3. Keep back when people are using shovels and measuring sticks.
4. Watch your step, especially on uneven ground.
5. Do NOT throw rocks, sticks, or anything else.
6. Do NOT do anything to damage trees or injure animals.

Clean Up

1. Clean up your work area and return all equipment to its proper place.
2. Dispose of waste materials as instructed by your teacher.
3. Wash your hands.

If you violate any of these rules, you could be removed from the laboratory, receive a zero for the activity, and face other consequences depending on the severity of the offense.

SAFETY FIRST!

By signing below, I am acknowledging that I have read the Laboratory Safety Rules outlined above, understand their contents completely, and will comply with and follow all safety rules and guidelines.

Student Signature: _____ Date: _____

Parent Signature: _____ Date: _____