## Science Safety Symbols

These symbols appear in laboratory activities to alert you to possible dangers and to remind you to work carefully.



Safety Goggles Always wear safety goggles to protect your eyes during any activity involving chemicals, flames or heating, or the possibility of flying objects, particles, or substances.



Lab Apron Wear a laboratory apron to protect your skin and clothing from injury.



Breakage Handle breakable materials such as thermometers and glassware with care. Do not touch broken glass.



Heat-Resistant Gloves Use an oven mitt or other hand protection when handling hot materials. Heating plates, hot water, and glassware can cause burns. Never touch hot objects with your bare hands.



Plastic Gloves Wear disposable plastic gloves to protect yourself from contact with chemicals or organisms that could be harmful. Keep your hands away from your face, and dispose of the gloves according to your teacher's instructions at the end of the activity.



Heating Use a clamp or tongs to hold hot objects. Do not touch hot objects with your bare hands.



Sharp Object Scissors, scalpels, pins, and knives are sharp. They can cut or puncture your skin. Always direct sharp edges and points away from yourself and others. Use sharp instruments only as directed.



Electric Shock Avoid the possibility of electric shock. Never use electrical equipment around water, or when the equipment or your hands are wet. Be sure cords are untangled and cannot trip anyone. Disconnect equipment when it is not in use.



Poison Do not let any poisonous chemical get on your skin, and do not inhale its vapor. Wash your hands when you are finished with the activity.



Physical Safety This activity involves physical activity. Use caution to avoid injuring yourself or others. Follow instructions from your teacher. Alert your teacher if there is any reason that you should not participate in the activity.



Animal Safety Treat live animals with care to avoid injuring the animals or yourself. Working with animal parts or preserved animals may also require caution. Wash your hands when you are finished with the activity.



Plant Safety Handle plants only as your teacher directs. If you are allergic to any plants used in an activity, tell your teacher before the activity begins. Avoid touching poisonous plants and plants with thoms.



Flames Tie back loose hair and clothing, and put on safety goggles before working with fire. Follow instructions from your teacher about lighting and extinguishing flames.



No Flames Flammable materials may be present. Make sure there are no flames, sparks, or exposed sources of heat present.



Fumes Poisonous or unpleasant vapors may be produced. Work in a ventilated area. Avoid inhaling a vapor directly. Test an odor only when directed to do so by your teacher, using a wafting motion to direct the vapor toward your nose.



Disposal Chemicals and other materials used in the activity must be disposed of safely. Follow the instructions from your teacher.



Hand Washing Wash your hands thoroughly when finished with the activity. Use antibacterial soap and warm water. Lather both sides of your hands and between your fingers. Rinse well.

## **Lab Safety and Procedures**

It is critical that each student be familiar with laboratory safety rules. Experimenting in a science classroom can be extremely fun but also be quite dangerous. Every scientist must learn fundamental laboratory skills in order to remain safe and protect him/herself from injury. You will be responsible for knowing and **practicing** the following rules and procedures in laboratory.

- Do not use chipped, cracked, or etched glassware
- Glassware will not always appear hot. Never pick up glassware without first checking to see if it is hot.
- If there is a potential risk of an eye injury wear safety goggles.
- Tie back long hair and loose clothing to prevent hair and materials from dangling over chemicals and open flames.
- Never "experiment" on your own by mixing chemicals or heating solutions.
- Never eat in laboratory or drink from glassware.
- Report all accidents to the teacher, regardless of how minor they appear.
- Be familiar with the location of the following: first aid box, fire extinguisher, eyewash, fire exits, fire blanket.
- Do not heat solutions or other lab materials unless instructed to do so by the instructor.
- Never touch, taste, smell, or touch a chemical unless instructed to do so by the teacher.
- Always waft a solution or chemical when instructed to determine the odor.
- Dispose of all chemicals properly as instructed by the teacher.
- Do not heat glassware that is still wet. Dry all glassware prior to heating.
- Handle scalpels and other dissection tools carefully as they are very sharp.
- Maintain a clean work area during the course of each laboratory.
- Never handle any equipment unless instructed.
- Take extreme care not to spill materials in the laboratory.
- When heating a test tube, be sure to point the tube opening away from you and others.
- Do not heat any solution/chemical in a closed container.
- If acids or chemicals are spilled on your skin, wash the off immediately using cool water.
- When an experiment is completed, clean up your work area and return all equipment to its proper place.
- Wash your hands with warm water and soap after each experiment.
- Do not "horseplay" in the laboratory.

To reinforce the importance of practicing sound laboratory safety, each student will receive a safety grade during each experiment/laboratory. Each student can earn a maximum of 10 points as a laboratory safety/participation grade. Points will be deducted according to violations of the above rules.

I have read the science safety rules and understand that I am responsible for maintaining lab safety while performing experiments. The teacher has gone over all safety concerns prior to performing labs. If I pose a safety hazard to the laboratory, the instructor may remove me from future laboratory exercises.

Student Signature	Date
Parent Signature	Date
Parent Email	Parent Telephone #