

Science Safety Scenarios

Read each scenario. Then using the symbols and information on the back of this sheet, identify all the safety symbols that should be on the student's lab sheet.

Example Scenario

The teacher was not in the room yet. Jake began weighing chemicals, touching them with his hands. His nose itched, so he rubbed it.

Safety Symbols: safety goggles, lab apron, plastic gloves, disposal, hand washing

Scenario 1

Maria was heating a test tube over a flame.

Safety Symbols:

Scenario 2

Adam broke a glass slide. Carefully he picked up pieces with one hand and placed them in the other hand. Then he dumped the glass pieces into the wastebasket.

Safety Symbols:

Scenario 3

Lisa was using a poisonous chemical when she spilled a little. She brushed the chemical off her lab bench and onto the floor.

Safety Symbols:

Scenario 4

Mike and Colleen plugged in the microscope, letting the cord hang in the sink.

Safety Symbols:











Scenario 5


Students were collecting plants to study their leaves and petal arrangements.


Safety Symbols:


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.
-  **Corrosive Chemical** This symbol indicates the presence of an acid or other corrosive chemical. Avoid getting the chemical on your skin or clothing, or in your eyes. Do not inhale the vapors. Wash your hands when you are finished with the activity.
-  **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 thorns.


 **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.

 **General Safety Awareness** You may see this symbol when none of the symbols described earlier applies. In this case, follow the specific instructions provided. You may also see this symbol when you are asked to design your own experiment. Do not start your experiment until your teacher has approved your plan.