

Safety Precautions for Conducting a Science Convention

Eye Protection	For all phases of a hands-on activity (i.e., gathering, working with, and cleaning up needed materials), safety glasses or goggles must be worn. Eye protection is to be sanitized in hot water and antibacterial dish detergent or using alcohol swabs.
Hand Protection	When an activity or investigation requires the use of laboratory latex-free gloves for hand protection, the gloves shall be appropriate for the hazard and worn throughout the activity.
Chemicals	Avoid any contact with skin. Solid chemicals, metals, matches, filter papers, broken glass, and other materials designated by the instructor are to be deposited in the proper waste containers, not in the sink. All accidents, chemical spills, and injuries must be reported immediately to the instructor, no matter how trivial they may seem at the time.
Fumes	Avoid inhaling in fumes that may be generated during an activity or investigation. Use a wafting technique when required to smell substances.
Attire	Dress appropriately for laboratory work by protecting your body with clothing and shoes. Tie back long hair and tuck into the collar. Do not wear loose or baggy clothing or dangling jewelry. Sandals or open-toed shoes are not to be worn. Laboratory aprons shall be appropriate to the size of the student and the hazard associated with the activity or investigation.
Food Investigations	Eating, drinking, and gum chewing are not permitted in the laboratory setting.
Sharp Objects	When carrying scissors, tips should be pointed toward the floor.
Moving Objects	Wear safety glasses or goggles.
Meter Sticks	Hold meter sticks in front and close to the body. Hold in an upright position, perpendicular to the ground.
Glassware	Glassware is to be washed with hot, soapy water and scrubbed with the appropriate type and sized brush, rinsed, dried, and returned to its original position. Remember that hot glass looks the same as cold glass. After heating, glass remains hot for a very long time. Determine if an object is hot by placing your hand close to the object but do not touch it.
Hot Plate	Hot plates with an on/off switch should replace open flames. Plug hot plates in close to the wall. Do not use extension cords or allow cords to drape over students' desks or work areas where students could accidentally upset the apparatus. Goggles should be worn at all times.
Allergies	Teachers should check to see if any students have food or contact allergies associated with any of the science investigations.
Outdoor activities	Pre-visit the outdoor site and identify any potential hazards (i.e, dangerous debris, poisonous plants, traffic). Establish clear and safe boundaries.
Supervised investigations	Students are never allowed to conduct any unauthorized experiment or to work alone or unsupervised.

Sources:

Full Option Science System (FOSS, 2008). *Taking FOSS Outdoors*.

<http://www.fossweb.com/delegate/ssi-wdf-ucm- webContent?dDocName=D567152>

National Science Teachers Association (NSTA, Updated May 2013). *Safety in the Science Classroom, Laboratory, or Field Sites*.

<http://www.nsta.org/docs/SafetyInTheScienceClassroomLabAndField.pdf>

Roy, K. (2015). Safety at first sight. *Science and Children*, 2(53), pp. 93-95.