

Electrical safety procedures: Industrial technology

In this activity you will learn about the hazards involved in working with electricity and the correct working procedures to avoid mishaps.

This material addresses aspects of the following syllabus outcomes:

- 4.1.1 The student identifies and applies fundamental OH&S principles when working with materials, tools and machines.
- 5.1.1 The student identifies, assesses and manages the risks and OH&S issues associated with the use of a range of materials, hand tools, machine tools and processes.

Extract from: Stage 4 Industrial Technology Syllabus © Board of Studies NSW 2003.

WORKING WITH ELECTRICITY CAN KILL



Electrical warning symbol

General workshop safety












- Always wear leather **footwear** as hot solder will burn through vinyl and fabrics.
- All students are to wear an **apron** in the workshop.
- Always wear **safety goggles** when using power tools or handling chemicals.








Activity: Electrical safety

Use the words from the word bank to complete the following points:

electrical	pulling	point	wet
solder	mask	equipment	faulty
workshop	electric	power	wet
live	battery	projects	soldering
switching	pushing	voltage	amp
safety goggles	faulty	power	gloves

-  Do not interfere with or try to adjust or modify any _____ item or piece of equipment.
-  Do not poke screwdrivers, scribes or any other item into the 240V _____ points.
-  Treat all electrical apparatus as _____ until proven otherwise. If any doubt exists, consult your teacher.
-  All student projects must be powered by _____ (9V). No mains powered projects are to be constructed.
-  Be careful when working with battery powered _____; a small current can cause heart fibrillations.
-  Electrical _____ must be checked by the teacher before you use it.
-  Check all tools and cords before _____ on. Do not use _____ equipment.
-  Switch off power points before _____ in or _____ out plugs.
-  Never joke around in the _____. This could cause injury or even death.
-  Never work with _____ hands or in _____ conditions as water is an excellent conductor of _____ current.
-  Report all _____ equipment and tools to the teacher immediately.

-  High or low _____ can kill. Death is most likely to occur when 1/5th to 1/10th of an _____ flows through the body. Symptoms can be burns, no breathing and muscular paralysis. Switch off power or remove source of electricity with a piece of dry wood. GET HELP !
-  When soldering, do not flick _____ off the point. A careless removal of solder could cause someone a serious injury.
-  Make sure the _____ of the soldering iron is kept away from the _____ cord.
-  Even if _____ irons look cold they may be HOT. Do not touch them on the point unless you are sure that they are cold.
-  When working with chemicals (etchants/solvents/fumes) always wear a _____ , _____ and disposable _____ , to protect your lungs, eyes and skin.