

## Industry Study: Safety and WorkCover: Industrial Technology

### Answers

#### Activity

Answer the following questions from the summary of the OH&S Regulation 2001

<http://www.workcover.nsw.gov.au/Publications/LawAndPolicy/Regulations/summaryohsreg2001.htm>

- Outline the five measures that must be taken to minimise or control risks?
    - Substitution of a less hazardous process, plant or substance.
    - Isolation of the hazard with physical barriers, distance or time.
    - Engineering controls such as automatic controls/guards, re-designing the workplace, extraction of fumes.
    - Administration changes to provide training, and OH&S management systems.
    - Personal protective equipment (PPE).
  - Employers are obligated to manage risks in their workplace. Visit the WorkCover web site <www.workcover.nsw.gov.au> and outline the steps that must be followed.
    - Hazard identification.
    - Risk assessment.
    - Eliminate or control the risks.
    - Review risk assessments and control measures.
3. For the following tools, machines and processes, identify the hazard and describe ways to minimise those hazards.

Tool Machine Process	Hazard	Ways to minimise the hazards
Chisel	<ul style="list-style-type: none"> <li>• Cuts to fingers or hands.</li> </ul>	<ul style="list-style-type: none"> <li>• NEVER hold work in your hand. Secure work in a vice or hold on a bench hook.</li> <li>• Always keep hands behind the cutting edge.</li> </ul>

<b>Drill press</b>	<ul style="list-style-type: none"> <li>• Loose work or drill bits may come loose and cause an injury.</li> <li>• Chuck key left in chuck may fly out when machine is turned on.</li> <li>• Long hair or loose clothing/jewellery may become entangled in moving parts.</li> <li>• Fine shaving may cause eye injuries.</li> </ul>	<ul style="list-style-type: none"> <li>• Secure work in the vice, tighten chuck and have teacher check set-up before starting.</li> <li>• Ensure chuck key is removed before starting machine.</li> <li>• Secure long hair and wear hair net or cap.</li> <li>• Roll up sleeves, wear an apron or overalls and remove jewellery.</li> <li>• Wear enclosed leather shoes.</li> <li>• Wear face and eye protection.</li> </ul>
<b>Router</b>	<ul style="list-style-type: none"> <li>• Severe cuts to fingers and hands which can be difficult to repair.</li> <li>• Hearing damage.</li> <li>• Loose workpiece moving and causing injury.</li> <li>• Loose router cutter flying out of chuck.</li> <li>• Cut to power cord.</li> </ul>	<ul style="list-style-type: none"> <li>• Never adjust router cutter unless power is switched off at power point. Do not remove router from workpiece until cutter has stopped rotating.</li> <li>• Wear earmuffs.</li> <li>• Ensure work is securely clamped. Teacher should check set-up before starting.</li> <li>• Ensure cutter is tightened correctly. Turn off power first.</li> <li>• Wear enclosed leather shoes.</li> <li>• Wear face and eye protection.</li> <li>• Use overhead power point and drape cord over your shoulder to keep it away from the cutter.</li> <li>• Secure long hair and</li> </ul>

	<ul style="list-style-type: none"> <li>• Risk of entanglement.</li> <li>• Dust</li> </ul>	<ul style="list-style-type: none"> <li>wear hair net or cap.</li> <li>• Roll up sleeves, wear an apron or overalls.</li> <li>• Wear a dust mask when necessary.</li> </ul>
Computer	<ul style="list-style-type: none"> <li>• Eye strain.</li> <li>• Injury to wrists.</li> <li>• Back strain.</li> </ul>	<ul style="list-style-type: none"> <li>• Use an anti-glare screen.</li> <li>• Re-focus eyes away from the screen regularly.</li> <li>• Ensure adequate lighting.</li> <li>• Adjust the keyboard angle.</li> <li>• Use an adjustable office chair.</li> <li>• Take regular rest breaks.</li> </ul>
Spray painting	<ul style="list-style-type: none"> <li>• Poisoning from fumes and overspray.</li> <li>• Eye and skin irritation and damage.</li> <li>• Risk of fire and explosion.</li> </ul>	<ul style="list-style-type: none"> <li>• Spray painting should only be carried out in schools in an approved extraction and filtering device, e.g. a spray booth which complies with Australian Standards.</li> <li>• Where there is no spray booth, spray painting should be carried out in an open area where exposure to fumes can be minimised.</li> <li>• Wear a respirator mask.</li> <li>• Wear eye protection and clothing to cover arms and legs.</li> <li>• Never spray in an area where electrical equipment is in use.</li> </ul>