SAFETY IN TECHNOLOGY WORKSHOPS:

##### Working with Wood, Metal and Plastic

Video Support Notes

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| Following many requests, these notes have been printed on  A4 size sheets for easy photocopying | | | |
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Duration 23 mins

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### Overview of video

This video provides a framework for safety when working in technology workshops. Students will encounter many hazards when working with wood, metal and plastic. Each of these hazards forms a chapter in the video:

Moving Around in the Workshop

Mess and Spills

Airborne Contaminants

Hazardous Substances

Manual Handling

Hand Tools

Machines and Portable Power Tools

Food Contamination

Noise

The video highlights the risks associated with each of these hazards and provides information on how to minimise the risks. This information will not only protect students during technology classes but outside the school environment as well. Industry representatives consistently emphasise the importance of potential employees having a solid grounding in occupational health and safety.

**Other Relevant VEA Material**

Avoid that Hazard: Equipment Safety in the Kitchen

Safe Manual Handling: 3 Steps to a Safer Workplace

Occupational Health & Safety in the Workplace

Introducing Health & Safety (Office Skills Series 2)

Safety in Work Experience: A Practical Guide

**Additional Resources**

Interactive tasks – educational software design and development specialists

[www.interactivetasks.com.au](http://www.interactivetasks.com.au)

Noel Arnold & Associates – Risk Management Services

[www.noel-arnold.com.au](http://www.noel-arnold.com.au)

SOFWEB – occupational health and safety - technology

[www.sofweb.vic.edu.au/hrm/ohs/school/techrm/index.htm](http://www.sofweb.vic.edu.au/hrm/ohs/school/techrm/index.htm)

Safety Line: Online

[www.safetyline.wa.gov.au](http://www.safetyline.wa.gov.au)

## Student Worksheet

1. Before watching the video
2. Look around the workshop and make a list of the dangers you see.
3. Make up a list of the dangers in a maths class and compare this to the list you wrote for 1(a).
4. What are the three stages of the “Risk Management Process”?

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1. What is a ‘hazard’?

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1. If a hazard cannot be safely managed, then that hazard should be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. What personal safety precautions should all students take before working in technology workshops?

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1. What’s the safest way to move around in a workshop?

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1. What should you do if you’ve spilt or dropped something?

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1. When is it alright to bring food or drink into the workshop?

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1. How much greater is the sound energy of some machines in technology workshops than normal conversation?

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1. What’s the simple rule to work out if your hearing is at risk?

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1. When should you use a
2. dust mask?

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1. respirator?

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1. enclosed goggles?

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1. What information can be found in Material Safety Data Sheets, or MSDS?

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1. What’s the correct way to lift a load?

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1. What causes more injuries? Circle the correct answer.
2. unpowered hand tools
3. powered tools and equipment
4. When you use a hand tool:
5. make sure it’s in \_\_\_\_\_\_\_\_\_\_ condition.
6. follow the \_\_\_\_\_\_\_\_\_\_\_\_\_ procedure.
7. put it \_\_\_\_\_\_\_\_ when you’ve finished.

16. Why are lines painted on the floor around machines?

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1. What should you do before making adjustments?

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**Further Activities**

1. After watching the video, compare the list you made for 1(a) to the hazards covered in the video –

Moving Around in the Workshop

Mess and Spills

Food Contamination

Noise

Airborne Contaminants

Hazardous Substances

Manual Handling

Hand Tools

Machines and Portable Power Tools

1. Develop a comprehensive safety plan for a hazard found in a technology workshop.

**Student Worksheet - Answers**

1. Before watching the video

(a) look around the workshop and make a list of the dangers you see.

(b) make up a list of the dangers in a maths class, and compare this to the list you wrote for 1(a).

**N/A**

1. What are the three stages of the “Risk Management Process”?

**Identify Hazards**

**Assess and Manage Risks**

**Avoid Unmanageable Hazards**

1. What is a ‘hazard’?

**Anything that has the potential to cause injury or illness**

1. If a hazard cannot be safely managed, then that hazard should be **avoided**.
2. What personal safety precautions should all students take before working in technology workshops?

**Tie back long hair and loose clothing**

**Remove anything that dangles or hangs loose like jewellery**

**Wear a protective apron or coat, and sturdy shoes**

1. What’s the safest way to move around in a workshop?

**Walk slowly and deliberately**

**Watch where you’re going**

**Behave appropriately**

1. What should you do if you’ve spilt or dropped something?

**Clean it up straight away**

1. When is it alright to bring food or drink into the workshop?

## Never

1. How much greater is the sound energy of some machines in technology workshops than normal conversation?

**100 000 times**

1. What’s the simple rule to work out if your hearing is at risk?

**If you have to raise your voice to make yourself heard to someone one metre away**

11. When should you use a

(a) dust mask?

**large airborne particles – dusts**

(b) respirator?

small airborne particles – fumes and vapours – turpentine

(c) enclosed goggles?

**small airborne particles – fumes and vapours -turpentine**

1. What information can be found in Material Safety Data Sheets, or MSDS?

**Correct handling procedures**

**Safety issues**

#### First aid advice

13. What’s the correct way to lift a load?

**Squat close to the load with your feet slightly apart**

Grip the load firmly with your palms and the base of your fingers and thumbs

**Use your leg muscles to lift the load**

**Keep your back straight**

14. What cause more injuries?

(a) unpowered hand tools

(b) powered tools and equipment

**(a) unpowered hand tools**

15. When you use a hand tool

(a) make sure it’s in **good** condition

(b) follow the **correct** procedure

(c) put it **away** when you’ve finished

1. Why are lines painted on the floor around machines?

**To signify the area in which only the operator of the machine is allowed when the machine is in use**

17. What should you do before making adjustments?

**Turn the machine or power tool off**

**Wait for it to stop**

**Disconnect it from power**