



Victorian Essential Learning Standards

Sample Unit

Tools

Level 1: Interpersonal Development, English

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Introduction

In *Tools* students listen to short texts about tools and explore how tools work, what tools are, what they are used for and how they developed over time. Following an investigation of simple tools used in the classroom, home and workplace, students design and construct their own tool. They develop skills in working with others, and write texts describing different tools. Students are introduced to the relationship between work and technology and develop an understanding of what work is and tools that are used for different jobs.

This unit provides opportunities for students to demonstrate achievement against the standards in Interpersonal Development and English. The activities also include learning experiences related to the domains of Personal Learning, Information and Communications Technology and Design, Creativity and Technology, although there are no standards at Level 1 in these domains.

Learning focus

This unit addresses learning focus statements from all three strands. These include:

Physical, Personal and Social Learning

Interpersonal Development

- develop skills in working in a group, including taking turns and sharing and caring for equipment and resources

Personal Learning

- reflect on their learning about writing, working in groups and designing and making tools
- develop confidence in asking questions about their learning
- manage resources to complete short tasks

Discipline-based Learning

English

- compose simple texts about tools and how they are used
- listen to brief spoken texts
- ask and answer simple questions

The Humanities

- compare tools from different times and the present



Interdisciplinary Learning

Design, Creativity and Technology

- generate ideas for the design of a tool
- produce and evaluate their own tool
- develop skills in the safe use of basic everyday tools

Information and Communications Technology

- work with text and images to create a simple slide show of their tool.

Victorian Essential Learning Standards

Tools can be used to assess a range of Victorian Essential Learning Standards.

The table below is an example of how this unit might be used to assess some Level 1 standards.

| Strand | Domain | Dimension | Key elements of standards |
|---|---------------------------|---------------------------|--|
| | | | Students: |
| Physical, Personal and Social Learning | Interpersonal Development | Interpersonal development | ...contribute to the development of positive social relationships in a range of contexts... ...describe basic skills required to work cooperatively in groups. |
| Discipline-based Learning | English | Writing | ...write personal recounts and simple texts about familiar topics to convey ideas or messages. ...use conventional letters, groups of letters, and simple punctuation such as full stops and capital letters. |
| | | Speaking and listening | ...ask and answer simple questions for information and clarification, contribute relevant ideas during class or group discussion, and follow simple instructions. |

For further advice see the [Assessment](#) section (page 10).



Teaching and learning activities

This unit focuses on the exploration of different tools, how they are used in everyday situations and how they have developed over time. Students design and create their own tool and practise posing and answering simple questions.

Throughout this unit, teachers provide opportunities for students to reflect on their own learning by using strategies such as reflective questions (see *Teaching and learning resource*).

Students discuss how to work cooperatively in groups (see ‘Collaborative learning strategies’ in the *Teaching and learning resource* and ‘Group assessment’ in the *Assessment resource*).

Teachers will need a variety of tools and opaque bags to put them in (one tool per bag).

Refer to Unit resources (see page 11) for student and teacher support materials and other materials required throughout the unit.

Ongoing activity

Teachers set up an area in the classroom to display a variety of simple tools, including ICT equipment and tools found in the classroom and around the home. Students can bring appropriate tools from home to add to the display. Each day, a small group of students are given the opportunity to play with the tools and to talk to each other about their use. Students select labelled cards and match them to the tools on display.

Throughout the unit, teachers assemble several groups of tools with similar properties, for example, metal tools used in the classroom or tools used at home. Students suggest a name for each group of tools. When agreement is reached, teachers label the displayed tools.

Activity 1: Tools

Teachers introduce the activity by reading an appropriate picture book, listening to a song or displaying a picture that focuses on particular tools. The class discusses how the tools in the stimulus are used. Throughout the unit, teachers read and discuss different texts with students, encouraging them to ask questions about the information, clarify ideas and discuss what they have learnt about tools.

Teachers brainstorm (see *Teaching and learning resource*) with students, tools that are used at home or school and record the responses.

Guessing game

Before commencing the activity, teachers place a tool in an opaque bag or a box.



Teachers model the guessing game for the whole class and explain to students that they will receive only a yes or no response to their questions. Students take turns to guess what is in the bag by asking questions such as, 'Is it a tool you would use in a kitchen?'

In groups, students repeat the process modelled by the teacher to work out which tool is in their bag.

Teachers lead the class through a process of reflection on the game by asking questions such as:

- What did you do that was helpful in working out what tool was in the bag?
- What did you do to help make the game a success in your group?
- What did you learn about tools from the game?

Students draw and label the tool they guessed. Teachers provide sentence starters to assist students to write about how the tool is used.

Students practise and reinforce their skills in working collaboratively with others, questioning, and reflecting on their personal learning. Students have opportunities to reinforce this and further develop understanding of the properties of tools by repeating the game throughout the unit.

Activity 2: Tools in the classroom

In this activity students complete an electronic worksheet using clip art. Before starting, teachers prepare a copy of an electronic file of Tools in the classroom (see page 13) for each student. Each file needs to be given a unique name so students only have to save their completed text, not change the file name.

Teachers provide examples of three or four simple tools, such as a pencil, stapler, and sharpener, then ask students questions such as:

- What is it?
- What is it used for?
- How does it work?
- What is it made from?
- Why is it a tool?

Teachers ask students, 'What tools do we use in our classroom?', lead a class brainstorm (see *Teaching and learning resource*) and record their ideas under the heading 'Tools in the classroom'. Students are encouraged to reply to the question 'Why is it a tool?'

Using the Tools in the classroom file (see page 13), each student finds graphics from a clipart library, for two tools used in the classroom, pastes the graphic into the worksheet and writes a sentence about why it is a tool.



Activity 3: Kitchen tools

In this activity students are encouraged to think about their learning and practise using reflective questioning. When introducing the activity, teachers ask students to close their eyes and try to visualise all the tools used in the kitchen.

Students draw their kitchen, including the tools.

Group activity

Teachers discuss types of questions students could ask each other about their drawings. In groups, students show their drawing and discuss the tools they drew and how they are used.

Alternatively, students create a mime or role play. Teachers:

- lead the class through a mime or role play of the actions people make when using different tools
- assist students to categorise the actions according to similarities and differences.

Students select one tool and write about how it is used in the kitchen.

Tools in the kitchen

Teachers divide the class into groups and give each group a card with a common kitchen activity written on it, for example eating breakfast, making a cake.

Teachers provide each student with a copy of Tools in the kitchen (see page 14) and assist students to find pictures from magazines and newspapers, of the tool they would use to complete the task.

Teachers model how to write a sentence about using the tool and then ask students to complete this section of the worksheet.

Teachers support students to share their drawings of tools and to explain why and how they use the tool. Completed worksheets can be displayed or used as evidence of students' progress towards achieving the standards for English. If students keep portfolios (see *Assessment resource*), these worksheets could be used as examples of student learning.

Exploring tools and rules

Teachers select a simple recipe that requires the use of a range of tools. They gather the required tools and prepare workstations for groups of students to make the recipe.

Before starting this activity, teachers outline safety rules for using kitchen tools and lead a brainstorm on why these rules are important.

Students practise using kitchen tools and applying safety rules by following a simple recipe. They select one rule and develop a poster, on paper or electronically, which includes the rule, an illustration or appropriate graphic, and a simple sentence about why this rule is important.



Activity 4: Tools at work

In this activity, students practise asking questions of a guest speaker who demonstrates the tools used in their work. There may also be opportunities for hands-on experience with the tools demonstrated.

Teachers brainstorm (see *Teaching and learning resource*) with students a simple set of questions that they could ask the speaker about the tools used in their work, including:

- What is your job?
- What kind of work do you do?
- What tools do you use at work?
- How are the tools used?
- What safety rules do you need to follow in your job?

Teachers provide copies of Tools at work (see page 15) for students to complete at home with the assistance of an adult.

Activity 5: Tools from the past

In this activity students explore how tools have changed. Teachers provide examples of tools used in the past and the present to do a similar task.

Using a think, pair, share (see *Teaching and learning resource*) strategy, students discuss how and why some tools have changed.

Teachers model using a T chart (see *Teaching and learning resource*), by filling in student responses to ‘how tools have changed’ under the headings of ‘past’ and ‘present’, on the appropriate section of the chart.

Using a combination of clip art library, digital photographs or cut and pasted paper images, students complete Tools from the past (see page 16).

Activity 6: Who uses what?

In this activity, students develop a page for a big book and reflect on the process and content for creating their page. Using an enlarged copy of Who uses what? (see page 17), teachers discuss with students the jobs represented in each graphic and what tools are used.

Students complete the task on their own copies of the worksheet by drawing a tool for each occupation.

Big book

Either on paper or electronically, teachers and students create a big book called ‘Who uses what?’ Teachers model a simple sentence structure, for example, ‘A builder uses a hammer’. Students select an occupation, write (or type with assistance) a sentence and draw a picture or insert a graphic of the tool.

In pairs, students reflect on their work by asking each other questions such as:

- Why did you choose that tool?
- What else could you write about your tool?

Activity 7: Designing a tool

In this activity, students are asked to think of a situation where the use of a tool would make a task easier and consider how they would design such a tool. A simple design brief (see *Teaching and learning resource*) could be introduced.

Teachers and students brainstorm examples related to everyday activities (for example, feeding a pet, collecting Lego pieces from the floor, or picking up papers in the school grounds) and discuss the materials that will be available to them.

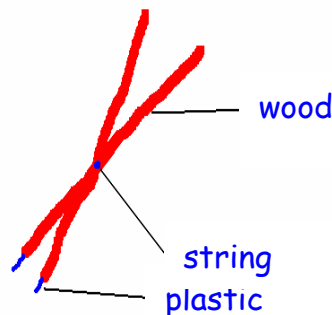
Students:

- decide on a tool to design
- draw their design on paper
- label the parts of their design and materials from which it was made.

Teachers and students discuss appropriate questions to ask about the designs, for example, ‘Why is this a good material to use?’ In pairs, students share their design ideas. Students ask each other questions and make helpful suggestions. Students modify their design as required.

An example of a student’s design:

My tool picks up papers. It is made of wood, plastic and string.



Activity 8: Producing a tool

In this activity, students produce their tools and ask each other questions about their final products.

Before commencing this activity teachers collect a range of materials, for example, icy pole sticks, glue and tacks. Students can also bring suitable items from home.

Students select the materials they need to make their tools.



Teachers discuss and model with students how different parts could fit together. Joining techniques will depend on materials used. Students take turns to demonstrate possible joining techniques.

Students test their tools as they construct them, modifying the design as needed. Students are encouraged to help each other.

Students share their tools with the class and explain:

- how they made their tool
- what the tool is for
- how successful they think their tool will be.

Teachers encourage students to ask questions about the process and product. Students reflect on what they have learnt about tools and how they have contributed to group work.

Class display

Teachers display the completed tools and take digital pictures of them. The images can be developed into a slide show with text or used to form a class book.

Links with other domains

This unit could also be related to the Mathematics and Science domains.

Mathematics

Students could be given opportunities to:

- sort tools into different sets
- count the elements and describe the characteristics of each set
- compare sets of equal and different sizes
- write simple sentences about sets, for example, 'This set is smaller than this set'
- ask questions about other students' sets
- pose categories for a partner to form different sets.

Science

Teachers may wish to extend the discussion by including tools that use different forms of energy and giving students opportunities to:

- classify tools according to use of energy such as electricity, petrol or hand
- identify and discuss safety rules for using electricity including safety switches, protective gear and practices, storage and safety signs.



Assessment

The Victorian Essential Learning Standards supports a combination of assessment practices:

- Assessment of learning (summative)
- Assessment for learning (formative)
- Assessment as learning (ongoing)

Further information on these can be found at:

<http://www.sofweb.vic.edu.au/blueprint/fs1/assessment.asp>

When assessing student achievement, assessment criteria can be developed from relevant standards and associated tasks or activities. The table below shows a range of assessment criteria, tools and strategies applicable to this unit. Teachers could choose to use some or all of these or use the unit to assess other standards.

| Standards | Assessment criteria (Examples) | Evidence |
|--|---|---|
| Interpersonal Development <i>Interpersonal development</i> | Ability to: <ul style="list-style-type: none">• take turns• work with others | Teacher observations and records of students' skills in working with others (Activities 1 and 3) |
| English <i>Writing</i> | <ul style="list-style-type: none">• write simple sentences about different tools• use conventional letters to form words within their sentences• use capital letters and full stops | Simple sentences on tools (Activity 1) Tools in the classroom (Activity 2) Tools in the kitchen (Activity 3) |
| English <i>Speaking and listening</i> | <ul style="list-style-type: none">• ask simple questions to gain or clarify information• respond to information by explaining or asking further questions• contribute ideas to class and group discussion | Teacher observations and records of students contributing ideas and asking questions in class, in group discussion and of a guest speaker |

See the *Assessment resource* for advice on developing rubrics.



Unit resources

Publications

Heron, C 2002, *Picture Australia's Past*, Heinemann Library, (A series of books including: Work, Home)

Parker, V 2004, *What tools do we use?*, Harcourt, Port Melbourne.

(A series of books including: At home, At school, In the garden, In the kitchen.)

Software

Microsoft Word

KidsPix Studio Deluxe

Equipment

A range of everyday tools

Pictures of tools

Poster cardboard

Range of materials such as icy pole sticks, glue, tacks, wood

Digital camera

Opaque bags

Picture books and songs on tools and occupations

Websites

At the time of publication the URLs (website addresses) cited were checked for accuracy and appropriateness of content. However, due to the transient nature of material placed on the Internet, their continuing accuracy cannot be verified. Teachers are strongly advised to prepare their own indexes of sites that are suitable and applicable to this unit of work, and to check these addresses prior to allowing student access.

www.askjeeves.com

KRBC 9 News: Does It Work? Archive

www.krbctv.com/does_it_work.htm

Inventors Museum

www.inventorsmuseum.com/museum_map.htm

Victorian Curriculum and Assessment Authority

<http://www.vcaa.vic.edu.au>

Victorian Essential Learning Standards

For information regarding Level 2 standards

<http://vels.vcaa.vic.edu.au>



Teacher materials

Teaching and learning resource

This document provides information about teaching and learning strategies referred to in the unit. It is available at <http://vels.vcaa.vic.edu.au/support/teaching.html>

Assessment resource

This document provides information about assessment strategies referred to in the unit. It is available at http://vels.vcaa.vic.edu.au/support/assessment_resource.html

Student materials

[Tools in the classroom](#) (page 13)

[Tools in the kitchen](#) (page 14)

[Tools at work](#) (page 15)

[Tools from the past](#) (page 16)

[Who uses what?](#) (page 17)

In each box, insert a picture of a tool you use in the classroom. Then write a sentence about each tool. You might have to change the size of the pictures and move them to the right spot.

Tools in the classroom

My name is:

In the classroom, I use a...

My sentence about the tool:

In the classroom, I use a...


My sentence about the tool:

Tools in the kitchen



Student Materials

Using a magazine or newspaper find a picture of a tool that you use. Cut out the picture and paste it on the sheet. Write the name of the tool and what you use it for.

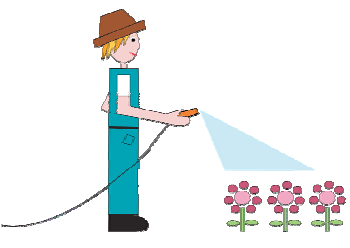
| Tools in the kitchen | | |
|-----------------------------|---|------------------------------|
| My name is: | | |
| Name of tool | Picture of the tool | What do I use it for? |
| Cup |  | To get a drink |
| | | |
| | | |

Tools at work



Student Materials

Ask two adults (your mother, father, a grandparent or your neighbour) the questions and write what they say in the spaces.

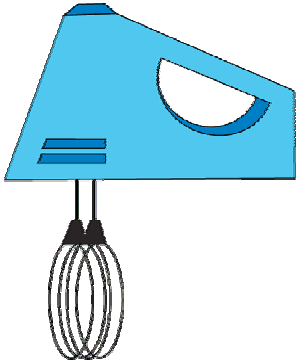
| Tools at work | | |
|---|--|--------------------------------|
| My name is: | | |
| What is your job? | What is one kind of thing you do at work? | What tools do you need? |
| gardener | water the garden | hose |
| | | |
| | | |
| Draw pictures of the tools they need for their work. | | |
|  | | |

Tools from the past



Student Materials

Put pictures in the table that show the changes from the olden days to now.

| Tools from the past | |
|---------------------|---|
| My name is: | |
| Olden days | Now |
| |  |
| | |
| | |

Who uses what?



Student Materials

Draw the tools that these people use at work.

Who uses what?

My name is:

