

Learning Assessment Guide

Unit Standard 2780 – Version 5

Demonstrate and apply knowledge of a personal computer system

Level 2 – 9 Credits

Assessment Summary			
Learner to complete			
Learner's name:			
Employer:			
NSN no. (ROL):		DOB:	
Signed:		Date:	
Assessor to complete			
<input type="checkbox"/> Meets requirements <input type="checkbox"/> More training required <input type="checkbox"/> More evidence required			
Assessor's name:		Assessor's No.	
Signed:		Date:	

Before you begin...

- As well as this Learning Assessment Guide, you may also want to refer to the unit standard from the NZQA website (<http://www.nzqa.govt.nz>).
- Read the Trainee Information Kit. The kit contains important information and guidelines for Learners and can be found on the Learning State website (<http://www.learningstate.govt.nz>) under Learners, then Learning Assessment Guides.
- Check the learning resources available for this unit standard on the Learning State website (<http://www.learningstate.govt.nz>) under Learners, then Learning Assessment Guides.

This assessment guide is made up of:

- tasks for you to complete
- a verification form for your manager to complete
- assessment results that the assessor will use to assess your competence.

The tasks in this assessment are designed to show your assessor that you can:

1. demonstrate knowledge of the hardware components of a personal computer system
2. demonstrate knowledge of the operation of the system and application software of a personal computer
3. operate a printer
4. complete basic operation and maintenance procedures for a personal computer system
5. demonstrate knowledge of ergonomic principles for the safe operation of a personal computer system.

Assessment Task One – Elements 1, 2 and 5

The questions in task one are designed to allow you to demonstrate your knowledge of:

- the hardware components of a personal computer system
- the operation of the system and application software of a personal computer system
- ergonomic principles for the safe operation of a personal computer system.

Task one questions

Please ensure your answers are clearly labelled.

1. Select **four** of the common hardware components of a personal computer.

- central processing unit
- motherboard
- keyboard
- mouse
- display monitor
- disk drive
- random access memory (RAM)
- read only memory (ROM)
- printer
- digital camera
- scanner
- modem
- connection to a network or the internet.

For each identify:

- the type of device it is (input, storage, output, processing, data transfer)
- the functions of the device
- the component(s) it is linked to by the flow of data.

1. What does the term “systems software” mean, and what does it do for a personal computer?
2. What does the term “applications software” mean, and what does it do for a personal computer?

3. How do systems and applications software work together?

4. Select **four** of the following applications and explain what they are used for:
 - word processor
 - spreadsheet
 - database
 - desk top publishing
 - graphics
 - communication.

6. Explain the purpose of rest periods and exercises when working on a personal computer system.

7. Identify and explain the safety importance of any **two** of the following when working with a personal computer system:
 - lighting
 - dust
 - ventilation
 - room space
 - temperature
 - cables
 - furniture

8. Identify and explain the ergonomic principles for **any two** of the following when working with a personal computer system:
 - keyboard rest
 - UV filter
 - anti-glare filter
 - mouse design
 - desk space
 - printer location.

Assessment Task Two – Elements 3, 4 and 5

This task designed to demonstrate your ability to safely operate, maintain use a personal computer and printer.

Task two activities

You will need to demonstrate your ability to safely operate and maintain a personal computer and printer to the assessor or an observer approved by the assessor.

They will observe you carry out the activities below and complete an observation form. You need to have the following computer components available:

- system unit
 - keyboard
 - monitor
 - mouse or other pointing device
 - printer
 - power leads.
1. Demonstrate how to connect these components. Please note: actual assembly or disassembly of computing equipment is often restricted to specialist IT staff. If this is the case, then you will show the assessor/observer how you would go about this with the assembled system.
 2. Power up the computer.
 3. Demonstrate how to overcome simple hardware faults such as faulty components and loose or disconnected plugs.
 4. Demonstrate how to maintain a personal computer system. Your demonstration should include the following:
 - cleaning
 - changing paper and printer ink tank/cartridge
 - using systems protection and utility software
 5. Demonstrate the operation of the printer by printing a page from an application, and how you identify and remedy a common error message such as mis-fed paper.

6. Demonstrate an understanding of ergonomic principles related to:

- posture in chair, including feet placement
- seating height
- position of monitor
- position of keyboard and mouse.

Assessment Task Three – Elements 1 to 5

Task three requires verification of your ability to operate and maintain a personal computer system from your manager.

Task three instructions

1. Brief your manager on the content of this unit standard.
2. Ask your manager to complete the following verification form.
3. Ensure that the completed form is given to your assessor.

Learner verification form – unit standard 2780 v5

Name of learner:	
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This learner is currently being assessed toward unit standard 2780 v5 – Demonstrate and apply knowledge of a personal computer system. Your knowledge of the learner is sought to verify whether or not the learner produced the submitted.

Please complete this form and arrange for it to be passed on to the assessor.

The learner has a working knowledge of the hardware components of a personal computer system and can respond appropriately to error messages.	Yes	No
The learner has a working knowledge of the maintenance of a personal computer system.	Yes	No
The learner has an understanding of and demonstrates safe ergonomic practices when using a personal computer.	Yes	No

Comments:

Name:		Phone:	
Position:		Date:	
Email:			

Assessment results

These are the judgements that your assessor will use to assess you.

Can the learner provide a comprehensive explanation of the components of a personal computer system?	Yes	No
Can the learner demonstrate understanding of the flow of data through a computer?	Yes	No
Can the learner demonstrate understanding of the purpose of each form of software?	Yes	No
Can the learner demonstrate printing data from a computer and in remedying common error messages?	Yes	No
Can the learner describe how to connect a personal computer system?	Yes	No
Can the learner describe and demonstrate on going care and maintenance of a computer system?	Yes	No
Can the learner demonstrate understanding of the ergonomic principles for the safe operation of a personal computer system?	Yes	No
Can the learner demonstrate ergonomic posture and placement of computer equipment?	Yes	No
Does the response from the learner's manager endorse the learner's demonstration and application of personal computer system knowledge?	Yes	No