

## Connecting an electrical circuit: ESOL unit standard 2981 (version 7)

Adapted to meet the requirements of version 7.

This assessment task assesses **one** of three tasks required by this unit standard.

NCEA LEVEL 2	
Unit standard	Elements and performance criteria
<p>Unit standard 2981, version 7</p> <p>Read texts giving instructions in familiar contexts (ESOL)</p>	<p><b>Element 1:</b> Read texts giving instructions in familiar contexts (ESOL).</p> <p>Range: three texts in familiar contexts.</p> <p><b>Performance criteria</b></p> <p>1.1 The purpose of each text is identified with reference to layout, and any headings, or graphics.</p> <p>1.2 Instructions in each text are followed correctly to complete the task.</p> <p>1.3 The meaning of essential vocabulary as used in each text is given.</p> <p>Range: ten words.</p>

## Teacher guidelines

<b>Unit standard 2981, version 7</b>	
<b>Read texts giving instructions in familiar contexts (ESOL)</b>	
<b>Level 2</b>	<b>3 credits</b>
<p>This unit standard has one element: <b>Element 1:</b> Read texts giving instructions in familiar contexts (ESOL). Range: three texts in familiar contexts.</p>	
<p><b>Conditions</b></p> <ul style="list-style-type: none"><li>• All assessment activities must be conducted in English, which must not be the student's first language.</li><li>• Understanding may be demonstrated by oral or written response.</li><li>• Written responses need not be grammatically correct, or in sentence form, but errors must not interfere with meaning.</li><li>• A bilingual and/or English dictionary but not an electronic translator may be used.</li><li>• Assistance may be given to understand the requirements of the task.</li></ul>	
<p><b>Learning context</b></p> <p>Assessment should follow class activities in which the students have had the opportunity to become familiar with the topic and vocabulary through a range of listening, speaking and writing activities. The question types should also be familiar to the students and this can be achieved by including similar question types in the formative work. The <i>English Language Intensive Programme</i> (ELIP) Stage 2, has suggested teaching components, strategies, language features and sample texts on evaporation (6c); 'How to use a Calculator' (6d); 'Growing a Bean Seed' (12d); 'How to Recycle Aluminium Cans' (21c); 'To make a Model of a Cell' (21d)</p> <p>Note, in this standard it is important that instructions contain an imperative verb form and for some of them to include more than one clause.</p>	
<p><b>Notes for Assessors</b></p> <ul style="list-style-type: none"><li>• It is important to be aware of the special notes of the unit standard.</li><li>• Each of the three texts should be assessed at a different time as part of a wider area of study.</li><li>• Students should not have seen the text before the assessment activity.</li><li>• Refer to your school's policies before offering further assessment opportunities.</li><li>• If resubmission takes place, the assessor should ensure that the correct answers are not inadvertently indicated prior to the resubmission opportunity.</li><li>• It is important that students can carry out the instructions independently. Assessors need to ensure that students cannot observe and copy the actions of other students.</li></ul>	

Student instructions

<b>Unit standard 2981, version 7</b> <b>Read texts giving instructions in familiar contexts (ESOL)</b> <b>Level 2</b> <span style="float: right;"><b>3 credits</b></span>	
<b>Element 1:</b> Read texts giving instructions in familiar contexts (ESOL). Range: three texts in familiar contexts.	
<b>Task: Connecting an Electrical Circuit</b>	
<b>Conditions</b> <ul style="list-style-type: none"> <li>• Do this activity in class.</li> <li>• You may ask for help to understand what you need to do.</li> <li>• You may use a bilingual and/or English dictionary but not an electronic translator.</li> <li>• Your spelling and grammar do not need to be perfect but your teacher needs to be able to understand what you mean.</li> </ul>	

Student checklist

In this assessment task you will need to show that you can do the following:	
Identify why the text was written using layout, and any headings, illustrations or diagrams.	1.1
Follow the instructions in the text to complete the task.	1.2
Give the meaning of ten important words from the text.	1.3

## Reading text

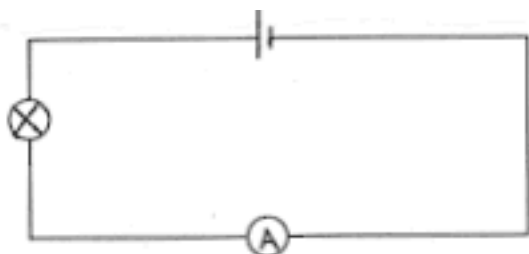
### Connecting an Electrical Circuit

#### Instructions

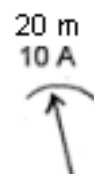
1. Collect from the teacher the following pieces of equipment:

- a cell
- a lamp
- a multimeter
- wires

(In this circuit the multimeter will be used as an ammeter to measure the flow of current in Amps.)



2. Connect up a circuit as shown in the diagram above, but before putting the multimeter into the circuit, check the following:



- The arrow at the top should point to the diagram.
- The negative terminal of the cell should connect to the com terminal on the meter.
- The positive terminal on the cell should connect to the lamp.
- The lamp should connect to the 10A terminal on the meter.
- Do not use the  $v\Omega$  terminal on the meter.

3. Switch on the power on the meter, and write down the reading on the meter on the paper below next to 1.3.

Student assessment task

<b>Unit standard 2981, version 7</b> <b>Read texts giving instructions in familiar contexts (ESOL)</b> <b>Level 2</b> <span style="float: right;"><b>3 credits</b></span>
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Name ..... Date .....

Read the text and answer the questions below.

**1.1 The purpose of each text is identified with reference to layout, and any headings or graphics.**

Read the text and look carefully at the layout, headings, and diagrams.

a. Which of these is the best identifies why the text was written? Tick one of the boxes.

a. To give information about electrical circuits.	
b. To let you know the advantages of using an electrical circuit.	
c. To show you how to connect an electrical circuit.	
d. To explain how an electrical circuit works.	

How did the layout, headings and diagrams help you to know the purpose of the text?

i) Layout: .....

ii) Heading: .....

iii) Diagrams: .....

**1.2 Instructions in each text are followed correctly to complete the task.**

a. Your teacher will supervise you as you follow the instructions in your science class.

b. Complete this sentence.

The reading on the meter was \_\_\_\_\_ Amps.

**1.3 The meaning of essential vocabulary used in the text is given**

3a. Fill in the missing words in these sentences, using the words below.

A i) \_\_\_\_\_ is a piece of equipment which gives energy to the electrons so they can move around the circuit. A cell has a positive terminal and a ii) \_\_\_\_\_ terminal. It does not matter which way round the iii) \_\_\_\_\_ is connected but the meter must be connected correctly. When we turn on the meter a iv) \_\_\_\_\_ shows up on it. In this experiment the multimeter is being used as an v) \_\_\_\_\_. We do not use the  $v\Omega$  terminal on the vi) \_\_\_\_\_ for this experiment.

Words to use:

lamp      cell      negative      ammeter      meter      reading

3b. Match the words with the meanings **as used in the text** by circling the correct meaning.

i) a circuit	a. a complete route an electrical circuit flows around. b. a track c. a series of events
ii) a current	a. a flow of water b. a flow of electricity c. a flow of air
iii) connect	a. arrive b. join c. associate
iv) check	a. make sure it is correct b. examine c. stop from spreading
v) terminal	a. causing death b. a place to begin or end a journey c. a part that electricity enters or leaves by
vi) switch	a. change to something different b. turn on c. transfer

Assessor checklist for 1.2

Student's name: .....

Date: .....

	A	NA
1. Collects cell, lamp, multimeter, 3 wires.		
2. Connects up circuit correctly.		
a. Arrow correct.		
b. Negative to com.		
c. Positive to lamp.		
d. Lamp to 10A terminal.		
e. Has not used $v\Omega$ .		
3. Power switched on and reading recorded correctly.		

The reading is: \_\_\_\_\_

Signed by assessor: \_\_\_\_\_ Date: \_\_\_\_\_

Steps 1 and 3 are followed correctly.

Step 2: Four out of five steps are followed correctly



Assessment schedule: Task – Connecting an electrical circuit

<b>Unit standard 2981, version 7</b> <b>Read texts giving instructions in familiar contexts (ESOL)</b> <b>Level 2</b> <span style="float: right;"><b>3 credits</b></span>		
<b>Element 1:</b> Read texts giving instructions in familiar contexts (ESOL). Range: three texts in familiar contexts.		
PC	Evidence	Judgement
1.1	1a. The answer is c) To show you how to connect an electrical circuit  1b. Answers similar to: i) Layout: Numbers and bullet points showed me it was instructions. ii) Heading: It showed me it was going to be about how to do something iii) Diagrams: They make me think it might be about science.	The purpose of the text is identified. Answers show that layout, headings, and diagrams have been used to identify the text. 1a: Answer is correct 1b: Two out of three answers are correct.
1.2	2. The reading is recorded and signed off by the assessor.	Instructions in the text are followed. Checklist is used to assess each student. Steps 1 and 3 are followed correctly. Step 2: Four out of five steps are followed correctly.  The recorded reading is correct.
1.3	3a. Correct answers are: i) cell ii) negative iii) lamp iv) reading v) ammeter vi) meter  3b. Correct answers are: i) a ii) b iii) b iv) a v) c vi) b	The meaning of essential vocabulary as used in the text is given.  In 3a & 3b a combined total of 10 out of 12 answers are correct.