

Learning Assessment Guide

Unit Standard 20363 – Version 1

Demonstrate knowledge of and inspect standards of length

Level 6 – 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 Learning Assessment Guide is made up of:

- Tasks for you to complete.
- Assessment results that your assessor will use to assess your competence.
- Verification forms for completion by your assessor or a person approved by your assessor.

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

- Explain the purpose of standards of length in relation to legal metrology.
- Identify and outline the legislation covering standards of length.
- Outline the metrological characteristics of standards of length.
- Explain and demonstrate care and storage of standards of length and calibration equipment.
- Demonstrate the calibration procedures for rigid line standards.
- Demonstrate the calibration procedures for a flexible line standard of length.

Assessment Resources:

- Quality Management System Manual
- Standards Procedures Manual
- CRI Standards Modules

General Instructions:

- You will need to meet with your assessor to decide whether you will supply each piece of information required in writing or respond to the assessor asking you oral questions. You can agree on a combination of the two. In some cases the assessment task makes it clear a document is required.
- Answer the written questions.

- Carry out the practical tests. These may be verified by your assessor or a person approved by your assessor.
- Your assessor may wish to ask you further oral questions to confirm your understanding and possibly supplement other evidence provided.
- Your assessor may ask you to inspect a standard of length to supplement other evidence provided.
- You may include results from other tests you have conducted to amplify and confirm competency.

All activities relating to this unit standard must comply with:

- Any policies, procedures and requirements of the Ministry of Consumer Affairs, Measurement and Product Safety Service.

Please review the unit standard before starting this assessment. The special notes section contains useful definitions and reference to resources.

Legislation relevant to this unit standard will include the Weights and Measures Act 1987, Weights and Measures Regulations 1999 and any subsequent amendments.

What do I do now?

- Read through all the information contained in this Learning Assessment Guide.
- Familiarise yourself with each task, and the instructions.
- Contact your assessor if necessary to clarify anything you are unsure of.
- Complete the assessment task as agreed on with your assessor.
- Contact your assessors when you have finished.
- Make sure you keep a written copy of your completed assessment task if you are sending the original copy to your assessor.

Assessment Task One – Element 1

Introduction

This assessment task is designed to assess your ability to explain the purpose of standards of length in relation to legal metrology.

Task One Questions

1. Identify the hierarchy of standards of length used in New Zealand.
(Your answer should explain who is responsible for each level, how often they are tested and where they are kept).
2. Explain the reason for each of the different levels.
3. Identify and explain the use of the different classes of standards of length.
4. Explain the underlying principles of length.

Assessment Task Two – Element 2

Introduction

This assessment task is designed to assess your ability to identify and outline the legal requirements covering standards of length.

Task Two Questions

1. Using the Weights and Measures Act 1987 and the Weights and Measures Regulations 1999, identify and list the relevant sections and or regulations relating to standards of length.
2. Describe the intent of each one.

Assessment Task Three – Element 3

Introduction

This assessment task is designed to assess your ability to identify and outline the metrological requirements and characteristics of standards of length.

Task Three Questions

1. Outline the metrological requirements for standards of length.
2. Outline the metrological characteristics of standards of length.

Assessment Task Four – Element 4

Introduction

This assessment task is designed to assess your ability to assess your ability to explain and demonstrate care during use and storage of length and calibration equipment.

Task Four Questions and Demonstrations

1. Clearly explain the purpose and function of the standards laboratory.
2. Clearly explain the safe handling and custody of standards of length and calibration equipment.
Your explanation must include personal safety, protection, accuracy, and custody of standards of length.
3. Carry out the demonstrations listed on the verification form.

Verification Form – Task Four

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These demonstrations can be completed in conjunction with tasks 5 and 6.

The verifier can be your assessor or another person approved by your assessor.

Name of learner:	
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The learner is currently being assessed against this unit standard. Part of the assessment includes ensuring that the learner can explain and demonstrate the safe care and storage of standards of length and calibration equipment. You have been asked to provide evidence in relation to this.

The assessor may wish to contact you to confirm or clarify your responses.

Thank you for your help.

Name of verifier:

Position in relation to learner:

Contact phone:

Email:

I can verify the following:

1. The learner demonstrated the correct procedure for cleaning one rigid line standard of length and one flexible line standard of length.

Comments

2. The learner clearly identified and isolated non conforming standards of length and test equipment.

Comments

3. The learner demonstrated the safe handling and storage of standards of length and test equipment according to procedures.

Comments

4. The learner demonstrated how to use the calibration equipment in a manner that would not degrade its accuracy.

Comments

Signed:

Date:

Assessment Task Five – Element 5

Introduction

This assessment task is designed to assess your ability to demonstrate the calibration procedures for rigid line standards.

Task Five Instructions

- Using the “Standards Procedures Manual” test a rigid line standard of length.
- Copies of all inspection documentation must be given to your assessor.
- If the verifier is a person other than your assessor a completed verification form must be handed to your assessor.

Verification Form – Task Five

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The verifier can be your assessor or another person approved by your assessor.

Name of learner:	
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The learner is currently being assessed against this unit standard. Part of the assessment includes ensuring that the learner can test a rigid line standard of length. You have been asked to provide evidence in relation to this.

The assessor may wish to contact you to confirm or clarify your responses.

Thank you for your help.

Name of verifier:

Position in relation to learner:

Contact phone:

Email:

I can verify the following:

1. The learner demonstrated the method of testing a rigid standard of length.

Comments

2. The learner followed the “Standards Procedures Manual” to determine the accuracy of the measure under test.

Comments

3. The learner determined the uncertainty of measurement in accordance with procedures.

Comments

4. The learner handled the rigid line standard of length in accordance with procedures.

Comments

5. The learner clearly recorded and filed the results as required by the “Standards Procedures Manual”.

Comments

Signed:

Date:

Assessment Task Six – Element 6

Introduction

This assessment task is designed to assess your ability to demonstrate the calibration procedures for a flexible line standard of length.

Task Six Instructions

- Using the “Standards Procedures Manual” test a flexible line standard of length.
- Copies of all inspection documentation must be given to your assessor.
- If the verifier is a person other than your assessor a completed verification form must be handed to your assessor.

Verification Form – Task Six

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The verifier can be your assessor or another person approved by your assessor.

Name of learner:	
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The learner is currently being assessed against this unit standard. Part of the assessment includes ensuring that the learner can test a flexible line standard of length. You have been asked to provide evidence in relation to this.

The assessor may wish to contact you to confirm or clarify your responses.

Thank you for your help.

Name of verifier:

Position in relation to learner:

Contact phone:

Email:

I can verify the following:

1. The learner demonstrated the method of testing a flexible line standard of length.

Comments

2. The learner followed the “Standards Procedures Manual” to determine the accuracy of the measure under test.

Comments

3. The learner determined the error and uncertainty of measurement in accordance with procedures.

Comments

4. The learner handled the flexible line standard of length in accordance with procedures.

Comments

5. The learner clearly recorded and filed the results as required by the “Standards Procedures Manual”.

Comments

Signed:

Date:

Assessment Results

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

Can the learner explain the purpose of standards of length in relation to legal metrology as follows?	Yes	No
Has the hierarchy of standards of length been identified and the reason for different levels been explained?	Yes	No
Have the classes of standards of length been clearly identified and their use been explained?	Yes	No
Have the underlying principles of length been explained?	Yes	No
Can the learner identify and outline the legislation covering standards of length as follows?	Yes	No
Have relevant sections of the Weights and Measures Act 1987 and Weights and Measures Regulations 1999 been outlined?	Yes	No
Can the learner outline the metrological characteristics of standards of length as follows?	Yes	No
Have the metrological requirements for standards of length been outlined?	Yes	No
Have the metrological characteristics of standards of length been outlined?	Yes	No
Can the learner explain and demonstrate the care and storage of standards of length and calibration equipment as follows?	Yes	No
Has the purpose and function of the standard laboratory been explained?	Yes	No
Has the cleaning and adjustment of specific standards of length been explained and demonstrated?	Yes	No
Have non-conforming standards been identified?	Yes	No
Has the safe handling and storage of standards of length and test equipment been explained and demonstrated?	Yes	No
Did the method of use not degrade the calibration equipment accuracy?	Yes	No
Can the learner demonstrate the calibration procedures for a rigid line standard of length?	Yes	No
Was the standard of length tested in accordance with organisational procedures?	Yes	No
Were the error and uncertainty of measurement determined in accordance with organisational requirements?	Yes	No

Did the learner handle the standard of length in accordance with organisational requirements?	Yes	No
Were testing results recorded in accordance with organisational requirements?	Yes	No
Was documentation completed according to organisational requirements?	Yes	No
Can the learner demonstrate the calibration procedures for a flexible line standard of length?	Yes	No
Was the standard of length tested in accordance with organisational procedures?	Yes	No
Were the error and uncertainty of measurement determined in accordance with organisational requirements?	Yes	No
Did the learner handle the standard of length in accordance with organisational requirements?	Yes	No
Were testing results recorded in accordance with organisational requirements?	Yes	No
Was documentation completed according to organisational requirements?	Yes	No