

# Example of developing a rubric



COMMONWEALTH *of* LEARNING

# Unit 1 Carry measurements and calculations

This is one of the core units of a certificate in furniture making at level 3.

It covers the knowledge and skills needed to accurately complete measurement and calculations of materials needed at work.



## Outcome / Competency:

Obtain measurement, perform simple calculations and estimate approximate quantities of materials for a specific job or project at work.

### **Elements:**

1. Obtain measurement
2. Perform simple calculations
3. Estimate approximate quantities



# Element 1 - performance criteria

## Element

1. Obtain measurement

## Performance criteria

1.1. The purpose of obtaining measurements is clarified and confirmed.

1.2 The most appropriate method to obtaining the measurements is selected and applied.

1.3 Accurate measurements are obtained, confirmed and recorded.

1.4 Standard processes and procedures relating to the industry and company operations are recognised and adhered to.

# Assessment task - Completing a measuring job

Installation of a piece of furniture in a room that could be:

- a floor or ceiling bookshelf
- a storage cupboard
- a built-in wardrobe
- or another piece of furniture

# Assessment rubric – measurement

Criteria	Competent	Not Yet Competent
purpose	Details of the job were checked and confirmed before measuring. Clear and accurate notes were made.	Details of the job were not checked and/ or confirmed before measuring. Notes not made or unclear or inaccurate.
tools / equipment	The appropriate tools and equipment for the job were chosen and used correctly.	The tools and equipment chosen were not appropriate for the job or were not used correctly.
method	The correct method to obtaining the measurements was used.	The method used to obtain the measurements was not correct.
measurements	Accurate measurements are obtained, confirmed and recorded appropriately.	Measurements obtained are not accurate, or not confirmed and recorded appropriately.
PPE	Appropriate PPE is used, and process and procedures followed.	Not all appropriate PPE is used, and process and procedures were not fully followed.

# Element 2 - performance criteria

## Element

2. Perform simple calculations

## Performance criteria

2.1 The purpose of obtaining the calculations is clarified and confirmed.

2.2 The method or formula to achieve the required result is selected and applied.

2.3 Simple calculations involving length, perimeter, mass and volume are carried out.

2.4 The results are confirmed and clarified.



# Assessment task – Performing simple calculations

Measure three different pieces of furniture (e.g. table, chair, and cupboard). If required to produce 10 pieces of each furniture work out:

- what volume of timber will need to be ordered for the job
- how heavy is the timber likely to be
- how much stain in total is needed to stain all the furniture
- etc.



# Assessment rubric - calculations

Criteria	Competent	Not Yet Competent
purpose	Checked what and why needs to be calculated. Purpose is clarified and confirmed.	The purpose of obtaining the calculations is not clarified and/ or not confirmed. Did not check what or why needs to be calculated.
method	The appropriate method or formula to make the calculations is used.	The used method or formula is not appropriate and did not achieve the required result .
calculations	All calculations involving length, perimeter, mass and volume are carried out.	Only some calculations are carried out.
results	All results are checked, confirmed and recorded accurately and appropriately,	Results are not checked or confirmed and / or records are not accurate or appropriate.

# Element 3 - performance criteria

## Element

3. Estimate approximate quantities

## Performance criteria

3.1 The types of standard unit packages of materials are identified from the work documentation and job specification.

3.2 The dimensions of the job are obtained from work documentation/ plans and drawings.

3.3 Quantities of materials suitable for the work to be undertaken are calculated, confirmed and recorded.

3.4 Materials cost for sample jobs are estimated within a 10% variance.

# Assessment task – estimate quantities

Work out a quote for a piece of furniture you have just made :

- list the materials you have used
- list the detentions of the job or get them from the drawing
- calculate the materials needed for the job
- estimate the cost of labor, overheads, wastage
- allow the correct percentage for GST or VAT

# Assessment rubric - estimate quantities

Criteria	Competent	Not Yet Competent
materials	All materials needed for the job are listed correctly. Any types of standard unit packages are correctly identified.	The types of standard unit packages of materials are not correctly identified and / or not all materials needed are listed correctly.
dimensions	The dimensions of the job are accurately obtained from work documentation/ plans and drawings.	The dimensions of the job are not accurately obtained from work documentation/ plans and drawings.
quantities	The correct quantities of materials needed are calculated, confirmed and recorded.	Not all quantities of materials are calculated, confirmed and recorded or they are not calculated or recorded correctly.
cost	Allowed for add on cost, GST and cost of labour estimated within a 10% variance.	Not allowed for all add on cost, GST and / or estimated cost of labour is with over 10% variance.