

Unit Title: Working with measurements

OCR unit number: J15

Life and Living Skill Area: Numeracy

Level: Entry 3

Credit value: 2

Guided learning hours: 20

Unit purpose and aim

This unit aims to provide learners working at Entry 3 with the opportunity to demonstrate that they can estimate length/height, weight, capacity and temperature, and select and use the appropriate measuring instrument to check their estimations.

Learning Outcomes	Assessment Criteria	Example of ways assessment criteria could be met
The Learner will: 1 Be able to estimate using standard units of measure	The Learner can: 1.1 Estimate length/height using standard units of measure 1.2 Estimate weight using standard units of measure 1.3 Estimate capacity using standard units of measure	<p>The learner will estimate length and/or height using standard units of measure. Examples of estimating length/height could include: estimating the length and width of a car parking space as 5m x 2 m, estimating the height of a fellow student as 5ft 6inches, estimating the height of a fence as 2 metres</p> <p>The learner will estimate weight using standard units. Examples of estimating weight could include: estimating the weight of a bag of shopping as about a 5 kilograms, estimating the weight of a parcel for posting as about one and half kilograms, estimating the weight of a cup of rice as about 100 grams.</p> <p>The learner will estimate capacity using standard units of measure. Examples could include: estimating if a saucepan is big enough for two litres of soup, estimating if 5 litres of weed killer can be</p>

Learning Outcomes	Assessment Criteria	Example of ways assessment criteria could be met
	1.4 Estimate temperature using standard units of measure	<p>mixed in a watering can, estimating the number of 5ml doses of medicine in a bottle of medicine.</p> <p>The learner will estimate temperature using standard units of measure. Examples could include: estimating the outside air temperature on a warm day as about 20°C, estimating body temperature as 100°F, estimating the temperature of bath water as 60°C.</p>
2 Know appropriate measuring instrument to use	2.1 Select appropriate measuring instrument for given task	<p>The learner will select the appropriate measuring instrument for the task. Examples could include: selecting a measurement wheel to measure distances outdoor, selecting digital scales for weighing items to be posted, selecting a measuring jug to measure milk for a recipe, selecting a thermometer to measure the room/body temperature.</p>
3 Be able to measure to the nearest labelled division	<p>3.1 Use appropriate measuring instrument to measure length/height</p> <p>3.2 Use appropriate measuring instrument to measure weight</p>	<p>The learner will use the appropriate measuring instrument to measure length/height. Examples could include: using an ultra sonic measuring device to measure the length of a room as 3 metres 44 centimetres, using a tape measure to measure the height of a fellow student as 5ft 7 and a half inches, using a measuring wheel to measure the length of a flower border as 6 metres 55 centimetres.</p> <p>The learner will use the appropriate measuring instrument to measure weight. Examples could include: weighing 12oz of flour using kitchen scales, weighing a packet for posting using digital scales noting that it weighs 324grams, weighing a travel bag on scales and recording the weight as 15 kilograms 350 grams.</p>

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	<p>3.3 Use appropriate measuring instrument to measure capacity</p> <p>3.4 Use appropriate measuring instrument to measure temperature</p>	<p>The learner will use the appropriate measuring instrument to measure capacity. Examples could include: using a measuring jug to measure 570ml of water to make a jelly, using a rain gauge to measure the previous night's rainfall as 2.2 centimetres, using a measuring beaker to measure 25ml of cleaning fluid.</p> <p>The learner will use the appropriate measuring instrument to measure temperature. Examples could include: using a thermometer to measure the room temperature as 19°C using a clinical thermometer to check own body temperature as 98.8°F, using a fridge thermometer to check the fridge temperature is lower than 5°C.</p>
<p>4 Be able to review estimates</p>	<p>4.1 Compare estimated and actual measurements</p> <p>4.2 Identify whether estimates were accurate</p>	<p>The learner will compare estimated and actual measurements for length/height, weight, capacity and temperature. Examples could include: comparing the estimated and actual measurements of a car parking space to show the difference in metres/centimetres, if any, and identifying whether the estimated dimensions were close to the actual measurements, comparing the estimated and actual weight of a parcel for posting to show the difference in weight in grams and identifying whether the estimated weight was close to the actual weight, comparing the estimated rainfall with the actual amount of rainfall measured, expressing the difference in centimetres and identifying whether the estimated measurement was close to the actual measurements, comparing the estimated room temperature</p>

Learning Outcomes	Assessment Criteria	Example of ways assessment criteria could be met
		with the actual room temperature in °C and identifying whether the estimate was close to the actual room temperature

Assessment

This unit may be assessed using any method, or combination of methods, which clearly demonstrate that the learning outcomes and assessment criteria have been met.

As far as possible, measurements should be purposeful and appropriate for the learner's programme of learning. The calculation to compare estimated measurements with actual measurements may also form part of the evidence for the units 'Working with whole numbers up to 100' and 'Working with whole numbers up to 1000'.

Possible ways of demonstrating that the assessment criteria have been met are provided in the third column of the unit, these are examples only, learners may demonstrate their ability to meet the criteria in many other ways.

Evidence requirements

Candidates must show they can choose and use appropriate measuring instruments for one task requiring measurement of length/height, one task requiring measurement of weight, one task requiring measurement of capacity and one task requiring measurement of temperature. All four measurements must be recorded to the nearest labelled or unlabelled division. Estimated measurements must be compared with actual measurements and candidates need to identify whether estimates were accurate.

The Record of Assessment and Evidence for this unit must be completed in full and signed by the assessor to confirm the evidence is authentic and meets the requirements of the learning outcomes and assessment criteria. The completed Record of Assessment and Evidence, together with any other appropriate form of evidence that has been generated for the unit, must be submitted for moderation.