Numeracy in practice teaching and learning examples



HUMAN METER

Precision and Efficiency in Catering Operation

In the catering industry, working with speed and precision is essential for tasks in the kitchen, dining room, and pastry shop. Staff must quickly and accurately determine quantities of ingredients to ensure smooth operations, minimize waste, and enhance customer satisfaction.

A key learning outcome is the ability to assess and calculate required amounts under pressure while maintaining quality. Additionally, mastering the use of calibrated measuring tools ensures accuracy, reduces errors, and upholds high standards. These skills lead to more efficient workflows and improved resource management in the catering sector.

Overview "HUMAN METER"

Context

Everyday life Work-related

Content

Quantity and number Dimension and shape

How to measure certain quantities by eve

Target group (incl. necessary prior skills and competences)

Adults and young adults, not necessarily workers in the catering field. Learners need to know basic units of measurement and how to know some measurement tools

Outcomes and results

Learners will have a correct perception of the main units of measurement to be used in cooking activities.

Cognitive processes

Processing information Reasoning Mathematizing

Dispositions

Self confidence Flexibility



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Main information				
Content	Natural and decimal numbers; Units of measurement: capacity weight and length.			
Target group	Adults and young adults, not necessarily workers in the catering field.			
	Learners need to know basic units of measurement and how to know some measurement tools.			
Learning intention	 Numeracy for personal and private purposes Numeracy for professional issues 			
Duration	Approx. 2 hours			
Material and resources	Objects related to the professional catering sector: containers of different size and shape, materials with different specific weight (flour, cutlery, plates, chocolate, etc), objects with different lengths (mixture, cutlery, pots, tablecloths, etc.)			
Group size	Range from 4 to 12 learners			
Problem statement	In the workplace, in the restaurant/hotel sector, speed and precision are required in making recipes of cooking and pastry, in creating cocktails, in setting up the room.			
	In the logic of good enough, the identification of measurements with good approximation is often sufficient to obtain an acceptable result in a plausible time.			
Working questions	 How long is one meter? Could you quantify 1 kg? And 1 l? How do you use the meter? How do you use a scale? 			
Learning outcomes and results	Learners will have a correct perception of the main units of measurement to be used in cooking activities and they will know how to estimate the quantities in the above context.			





Working plan

Time (lessons)	Description of content/activities	Material	Methodical and didactic information ¹
20'	1. Activation Each learner has direct experience of the basic reference measure. There will be 3 objects that represent exactly: 1 kg, 1 m, 1Lt	The meter (measuring instrument); 1 weight of 1 kg: 1 container graduated from 1 Lt.	Explicit teaching Experi- menting
50'	2.Competition In this phase there will be heats during which 3 items will be exhibited. Learners will have to assign and write on a card the value they feel is closest to the correct weight, capacity and length. Learners will be awarded a score depending on how close they are: exact or very close value: 6 points average value: 3 points very different value: 1 point	Cards; Items (like water, sugar, flour, table cloth and napkin) in different quantity	Hands on learning Questioning
60'	3.Final competition Pairs of learners are created based on the score obtained in phase 2 (the student who has achieved the best result will be paired with the student who has achieved the worst result). Pairs will compete to guess another measurements.	Cards; Items (like water, sugar, flour, table cloth and napkin) in different quantity	Hands on learning Questioning

 $^{^{1}}$ for description and explanation of kinds of tasks, HITS and other background information please consult the teacher's/user's guide





30'	4.Conclusion	
	The last part of the activity involves a final moment when learners compare on the experience. They are asked to do a self-assessment ("Do you feel you have more confidence with the units of measurement analysed? do you think you have improved in what is the estimate of quantities?").	Feedback