

NUMERACY SKILLS

UNIT CODE: BUS/CU/HRM/BC/02/5/A

Relationship to Occupational Standards:

This unit addresses the unit of competency: Demonstrate Numeracy Skills

Duration of Unit: 40 hours

Unit Description

This unit covers the competencies required to perform numerical functions. The person who is competent in this unit shall be able to: calculate with whole numbers and familiar fractions, decimals and percentages for work; estimate, measure, and calculate with routine metric measurements for work; use routine maps and plans for work; interpret, draw and construct 2D and 3D shapes for work; interpret routine tables, graphs and charts for work; collect data and construct routine tables and graphs for work; and use basic functions of calculator

Summary of Learning Outcomes

1. Calculate with whole numbers and familiar fractions, decimals and percentages for work
2. Estimate, measure and calculate with routine metric measurements for work
3. Use routine maps and plans for work
4. Interpret, draw and construct 2D and 3D shapes for work
5. Interpret routine tables, graphs and charts for work

6. Collect data and construct routine tables and graphs for work
7. Use basic functions of calculator

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Calculate with whole numbers and familiar fractions, decimals and percentages for work	<ul style="list-style-type: none"> • Interpretation of whole numbers, fractions, decimals, percentages and rates • Calculations involving several steps • Calculation with whole numbers and routine or familiar fractions, decimals and percentages • Conversion between equivalent forms of fractions, decimals and percentages • Application of order of 	<ul style="list-style-type: none"> • Oral • Written • Practical test • Observation

Learning Outcome	Content	Suggested Assessment Methods
	<p>operations to solve multi-step calculations</p> <ul style="list-style-type: none"> • Application of problem solving strategies • Making estimations to check reasonableness of problem solving process, outcome and its appropriateness to the context and task • Use of formal and informal mathematical language and symbolism to communicate the result of a task 	
2. Estimate, measure and calculate with routine metric measurements for work	<ul style="list-style-type: none"> • Selection and interpretation of measurement information in workplace tasks and texts 	<ul style="list-style-type: none"> • Oral • Written • Practical test • Observation

Learning Outcome	Content	Suggested Assessment Methods
	<ul style="list-style-type: none"> • Identification and selection of routine measuring equipment • Estimation and making measurements using correct units • Estimation and calculation using routine measurements • Performing conversions between routinely used metric units • Using problem solving processes to undertake tasks • Recording information using mathematical language and symbols 	
3. Use routine maps and plans for work	<ul style="list-style-type: none"> • Identification of features in routine maps and plans • Symbols and keys used in routine 	<ul style="list-style-type: none"> • Oral • Written • Practical test • Observation

Learning Outcome	Content	Suggested Assessment Methods
	<p>maps and plans</p> <ul style="list-style-type: none"> • Identification and interpretation of orientation of map to North • Demonstrate understanding of direction and location • Apply simple scale to estimate length of objects, or distance to location or object • Give and receive directions using both formal and informal language 	
4. Interpret, draw and construct 2D and 3D shapes for work	<ul style="list-style-type: none"> • Identify two dimensional shapes and routine three dimensional shapes in everyday objects and in different orientations • Explain the use and application of shapes 	<ul style="list-style-type: none"> •

Learning Outcome	Content	Suggested Assessment Methods
	<ul style="list-style-type: none"> • Use formal and informal mathematical language and symbols to describe and compare the features of two dimensional shapes and routine three dimensional shapes • Identify common angles • Estimate common angles in everyday objects • Use formal and informal mathematical language to describe and compare common angles • Use common geometric instruments to draw two dimensional 	

Learning Outcome	Content	Suggested Assessment Methods
	shapes <ul style="list-style-type: none"> • Construct routine three dimensional objects from nets 	
5. Interpret routine tables, graphs and charts for work	<ul style="list-style-type: none"> • Identify routine tables, graphs and charts in predominately familiar texts and contexts • Identify common types of graphs and their different uses • Identify features of tables, graphs and charts • Locate specific information • Perform calculations to interpret information • Explain how statistics can inform and persuade • Identify misleading 	<ul style="list-style-type: none"> • Oral • Written • Practical test • Observation

Learning Outcome	Content	Suggested Assessment Methods
	statistical information <ul style="list-style-type: none"> • Discuss information relevant to the workplace 	
6. Collect data and construct routine tables and graphs for work	<ul style="list-style-type: none"> • Identify features of common tables and graphs • Identify uses of different tables and graphs • Determine data and variables to be collected • Determine audience • Select a method to collect data • Collect data • Collate information in a table • Determine suitable scale and axes • Draft and draw graph to present information 	<ul style="list-style-type: none"> • Oral • Written • Practical test • Observation

Learning Outcome	Content	Suggested Assessment Methods
	<ul style="list-style-type: none"> • Check that data meets the expected results and context • Report or discuss information using formal and informal mathematical language 	
7. Use basic functions of calculator	<ul style="list-style-type: none"> • Identify and use keys for basic functions on a calculator • Calculate using whole numbers, money and routine decimals and percentages • Calculate with routine fractions and percentages • Apply order of operations to solve multi-step calculations • Interpret display and record result • Make estimations 	<ul style="list-style-type: none"> • Oral • Written • Practical test • Observation

Learning Outcome	Content	Suggested Assessment Methods
	<p>to check reasonableness of problem solving process, outcome and its appropriateness to the context and task</p> <ul style="list-style-type: none"> • Use formal and informal mathematical language and appropriate symbolism and conventions to communicate the result of the task 	