Unit ID: 1153

Domain **FOUNDATION NUMERACY SKILLS**

Title: **Apply basic numeracy skills in a workplace environment**

Level: 1 **Credits: 5**

Purpose

This unit standard specifies the outcomes required to apply numeracy skills in a workplace environment. It includes applying basic knowledge of number and statistics, measuring materials and objects and performing basic geometric functions. This unit standard is intended for people requiring basic numeracy skills to apply in a work environment.

Special Notes

1. This unit standard may be used as a core or elective within any vocationally based qualification.

2. The assessor must be satisfied that the candidate can demonstrate an understanding of, or competency against, the unit standard as a whole.

3. Assessment evidence may be collected at any realistic place or simulated real place where logical collection of such evidence can be achieved.

4. The correct use of the suitable technical terminology must be stressed, especially in formulating definitions and principles.

5. *Glossary:*
   - *'Numeracy skills'* refer to the ability to use mathematical terms and functions to perform routine calculations and solve routine problems.

6. Regulations and legislation relevant to this unit standard include the following:
   - None

Quality Assurance Requirements

This unit standard and others within the subfield may be awarded by institutions that meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na

Elements and Performance Criteria

Element 1: Apply basic knowledge of numbers and statistics

Range

Materials required not limited to pen, pencil, eraser, calculator and coloured pencils and/or markers.

Use of mathematical symbols include but not limited to writing mathematic symbols, speaking and listening using mathematic symbols and reading statements with mathematical symbols.

Place value refers to the value a digit has when it is in a particular place like tens, hundreds, thousands etc.

Performance Criteria

1.1 Basic mathematical symbols are recognised.

1.2 Mathematical symbols and terms are used correctly.

1.3 The value of a digit is given from different number places.

1.4 Whole and decimal numbers are rounded.

1.5 The term percentage is explained and changes of fractions to percents are correctly performed.

1.6 Terms ration, rate and proportion are explained and related calculations are correctly performed.

1.7 The purpose of graphs and charts is explained and examples of commonly used graphs are given.

1.8 Information from a given graph is interpreted correctly.

Element 2: Measure materials and objects.

Range

Measures include length, weight, mass, time, capacity and temperature.

Units of measurement and their abbreviations may include linear measurements i.e.: millimetre, centimetre, meter kilometre; weight i.e.: milligram, gram, kilogram and tonne; time i.e.: seconds, minutes, hours, days, weeks, months, years; capacity i.e.: millilitre, litre, cubic metres; surface area i.e. millimetre squared, centimetre squared, kilometre squared, hectare; and temperature i.e.: degrees in Celsius.

Measurement instruments may include rulers, watches/clocks, calibrated small containers thermometers and scales.

Performance Criteria

2.1 Various terms as relate to measurement are explained.

2.2 Measuring instruments are identified and correctly selected to perform measuring tasks.

2.3 Appropriate units of measure are identified.

2.4 Measuring instruments are used correctly in line with manufacturer's instructions.

2.5 Measurements are converted using the metric system.

Element 3: Perform basic geometric calculations

Range

Dimensional shapes limited to regular two dimensional shapes and regular three dimensional shapes.

Performance Criteria

3.1 Two and three regular dimensional shapes are identified.

3.2 Two and three regular dimensional shapes are sketched from direction and real life objects.

3.3 Terms exponents, powers area and volume are explained.

3.4 Calculations with exponents and powers are performed.

3.5 Areas of rectangles, triangles and circles are calculated.

3.6 Volume of regular three dimensional objects is calculated.

Registration Data

Subfield:	Numeracy
Date first registered:	27 March 2013
Date this version registered:	27 March 2013
Anticipated review:	2017
Body responsible for review:	Namibia Training Authority