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National Unit Specification

Unit title: Lifeskills Mathematics: Mathematics at Work (National 5)

SCQF: level 5 (6 SCQF credit points)

Unit code: to be advised

Unit outline

The general aim of this Unit is to develop skills linked to the use of mathematics in the workplace and in the wider world. These include skills in extracting and analysing information in order to make informed decisions and logical plans. The Outcomes cover aspects of measurement, geometry and statistics, in situations requiring skills of reasoning.

Learners who complete this Unit will be able to:

1 Use reasoning skills and measurement skills linked to contexts in the workplace and in the wider world
2 Use reasoning skills and geometric skills linked to contexts in the workplace and in the wider world
3 Use reasoning skills and statistical skills linked to contexts in the workplace and in the wider world

This Unit is a mandatory Unit of the Lifeskills Mathematics (National 5) Course and is also available as a free-standing Unit. The Unit Specification should be read in conjunction with the *Unit Support Notes* which provides advice and guidance on delivery, assessment approaches and development of skills for learning, skills for life and skills for work. Exemplification of the standards in this Unit is given in the *National Assessment Resource*.

Recommended entry

Entry to this Unit is at the discretion of the centre. However, learners would normally be expected to have attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

- Lifeskills Mathematics (National 4) Course or its component Units
- Mathematics (National 4) Course or its component Units

In terms of prior learning and experience, relevant experiences and outcomes may also provide an appropriate basis for doing this Unit. Further information on relevant experiences and outcomes will be given in the *Unit Support Notes*.

Equality and inclusion

This Unit Specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. For further information please refer to the *Unit Support Notes.*

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Standards

Outcomes and assessment standards

Outcome 1

The learner will:

1 Use reasoning skills and measurement skills linked to contexts in the workplace and in the wider world by:

1.1 Calculating a quantity based on two related pieces of information
1.2 Constructing a scale drawing, including choosing a scale
1.3 Planning a navigation course
1.4 Carrying out efficient container packing
1.5 Using precedence tables to plan tasks
1.6 Considering the effects of tolerance

Outcome 2

The learner will:

2 Use reasoning skills and geometric skills linked to contexts in the workplace and in the wider world by:

2.1 Investigating a situation involving gradient
2.2 Solving a problem involving a composite shape which includes part of a circle
2.3 Solving a problem involving the volume of a composite solid
2.4 Using Pythagoras' theorem within a two-stage calculation

Outcome 3

The learner will:

3 Use reasoning skills and statistical skills linked to contexts in the workplace and in the wider world by:

3.1 Using statistics to analyse and compare data sets
3.2 Drawing a line of best fit from given data

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Evidence Requirements for the Unit

Assessors should use their professional judgement, subject knowledge and experience, and understanding of their learners, to determine the most appropriate ways to generate evidence and the conditions and contexts in which they are used.

Evidence may be presented for individual Outcomes or it may be gathered for the Unit as a whole through integrating assessment holistically in one single activity. If the latter approach is used, it must be clear how the evidence covers each Outcome.

For this Unit, learners will be required to produce evidence of using reasoning skills with measurement, geometric and statistical skills linked to contexts in the workplace and in the wider world.

A calculator or equivalent technologies may be used.

Exemplification of assessment will be provided in the *National Assessment Resource*. Advice and guidance on possible approaches to assessment is provided in the *Unit Support Notes*.

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Development of skills for learning, skills for life and skills for work

It is expected that learners will develop broad, generic skills through this Unit. The skills that learners will be expected to improve on and develop through the Unit are based on SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work* and drawn from the main skills areas listed below. These must be built into the Unit where there are appropriate opportunities.

2 Numeracy

2.1 Number processes
2.2 Money, time and measurement
2.3 Information handling

5 Thinking skills

5.3 Applying
5.4 Analysing and evaluating

Amplification of these is given in SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work.* The level of these skills should be at the same SCQF level of the Unit and be consistent with the SCQF level descriptor. Further information on building in skills for learning, skills for life and skills for work is given in the *Unit Support Notes.*

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Administrative information

Published: August 2011 (draft version 1.0)

Superclass: to be advised

History of changes

Version	Description of change	Authorised by	Date

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