NUMERACY
SCQF Level 3
40 Hour Unit (F3GF 09)

CORE SKILLS UNIT

What are Core Skills?

Core Skills are skills and abilities that everyone uses in their family and personal life, at work, in public, in the community, and in education and training.

The Core Skills are:

♦ Communication

♦ Numeracy

♦ Information and Communication Technology

♦ Problem Solving

♦ Working with Others

They are important because they help you to be effective in almost everything you do. That's also why employers value them.

Improving your Core Skills helps you cope with today's quickly changing world. It will make you more confident, help you to learn more easily, and improve your career prospects.

What is this Core Skills Unit about?

This Unit is about using simple number skills, calculations, graphical information, and measuring to solve problems based on familiar, everyday things.

If there are any words you don't understand in this Unit, your tutor will explain them to you.

What should I know or be able to do before I start?

You do not need any knowledge or experience before you start.

The Core Skill of Numeracy at SCQF level 2 provides good preparation for this Unit.

Your tutor will offer you time to practise your skills.

What do I need to do?

Calculation

You will:

♦ use notation for each of the following — whole numbers (for example, 5), simple decimals (for example, 2.45), simple percentages (for example, 30%), simple fractions (for example, 2/3), and simple ratios (for example, 1:3, 5:1)

♦ carry out all of the following — addition, subtraction, multiplication, division

♦ carry out simple calculations involving either whole number percentages (for example, 30%) or simple fractions (for example, 2/5)

♦ decide which calculations need to be carried out and in what order (for example, add then multiply)

♦ draw conclusions from the results of your calculation

Measuring

You will:

- read and use a simple measuring instrument (for example, a ruler, a metre stick, or a thermometer) to make a measurement to the nearest marked number or on a graph to make measurements to the nearest marked number

- recognise common units in which different quantities are measured (for example, length in centimetres or metres; weight in grams or kilograms; volume in litres)

- recognise and use whole numbers (for example, 5) and decimal numbers (for example, 2.4, 3.05, 4.0)

- make a simple numerical comparison between items

- use the results of your measuring activities to solve problems and make decisions

Using graphical information

You will **get** information from at least one of the following:

- a simple table containing two categories of information (for example, a timetable or a distance table)

- a simple chart (for example, a bar chart or pie chart)

- a simple graph (for example, a line graph with a simple scale)

- a simple diagram (for example, a diagram of a two-dimensional shape such as a floor plan or a two-dimensional representation of a familiar three-dimensional shape such as a cube, or a simple map)

You will also **give** information through at least one of the following:

- a simple table containing two categories of information (for example, a timetable or a distance table)

- a simple chart (for example, a bar chart or pie chart)

- a simple graph (for example, a line graph with a simple scale)

- a simple diagram (for example, a diagram of a two-dimensional shape such as a floor plan or a simple map)

How do I get this Unit?

You will need to show that you have all the skills in the Unit. You can use a calculator or other electronic method to get your answers if you would usually do this. You could also show your skills by writing or by telling your tutor your answers.

What might this involve?

Here are examples of some things you might do:

Calculation:

♦ calculate the number of extra staff required for a 20% increase in staffing if a firm employs 200 people

♦ decide how many adults are required to take a group of 20 children on an outing, if current guidance recommends a child:adult ratio of 5:1

♦ decide the best time to leave the house for work, based on a journey time of 35 minutes if you have to be there at 8.30 am

♦ work out the cost of 3/4 of a kilo of potatoes, when the price per kilo is £1.60

Using graphical information:

♦ work out the cheapest option in a simple table of mobile phone tariffs

♦ compare the cost of 1st and 2nd class postage for a package

♦ use a street map to find your nearest swimming pool

♦ complete a fuel consumption chart for a car

♦ provide information in a bar chart that shows numbers of people buying different brands of jeans

Measuring:

♦ use scales to measure your own weight to find if you are below or above average weight

♦ use a thermometer to measure the temperature of a room to decide if the heating should be turned on

- use a measuring jug to check that the volume of milk it contains matches the amount required in a recipe

- use a speedometer in a car to see if you are keeping within the speed limit

- use a tape measure to measure a table to see if it will fit into a space

What can I do next?

You could move on to the Numeracy Unit at SCQF level 4.

You could think about doing other Core Skills Units in:

- Communication

- Information and Communication Technology

- Problem Solving

- Working with Others

Your tutor can advise you about this.

Guidance for tutors

Learners may carry out the calculations mentally, in writing, or using a calculator or other electronic device such as a computer. Learners should check their answers, although evidence of checking is not required.

Calculation

The numerical tasks involving calculations should be familiar to learners and will only involve a small number of steps.

Using graphical information

Select graphical formats that are likely to be familiar to learners from which they can extract information. You should specify which graphical form is to be used to communicate selected information, and design the tables, graphs, charts, or diagrams for learners to complete.

Measuring

Learners should be clear about the reasons for making the measurement and should be guided as to the deductions that can be made from the results.

Use instruments with scales on which the main divisions are numbered and the subdivisions are marked but not numbered. Learners are only expected to measure to the nearest marked number.

Measuring instruments must have analogue scales: electronic instruments with digital readouts are not applicable for this Unit.

Further guidance is available in the accompanying Assessment Support Pack.

Disabled learners and/or those with additional support needs

The additional support needs of individual learners should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website **www.sqa.org.uk/assessmentarrangements**.

Credit value
6 SCQF credit points (1 SQA credit) at SCQF level 3

XSQA

Unit code:	F3GF 09
Superclass:	RB
Publication date:	August 2009
Source:	Scottish Qualifications Authority
Version:	02

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