



NUMERACY
SCQF Level 6
40 Hour Unit (F3GF 12)

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 complex numerical skills in everyday settings that involve graphical information, calculations, and solving problems.

If there are 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 may have achieved the Core Skills Unit in Numeracy at SCQF level 5. Alternatively, you may be able to show that you have similar experience, for example, using tables, charts, and graphs to extract, analyse, and convey information; solving problems by carrying out numerical calculations.

What do I need to do?

You will:

- ◆ analyse situations to identify relevant numerical data and relationships to solve problems
- ◆ decide which operations to carry out, and in what order, to solve a problem (the process of reaching a solution will have several stages, some of which might involve more than one numerical calculation)
- ◆ use numerical or statistical theory (for example, using formulae to represent relationships in symbolic form; manipulating numbers represented by symbols; applying statistical concepts such as standard deviation)
- ◆ extract, analyse, and interpret information from complex graphical forms
- ◆ identify significant features in complex graphical information (for example, patterns, scatter, discontinuities, and rates of change) and interpret these in relation to the underlying variables
- ◆ select an appropriate graphical form and use it to communicate information

How do I get this Unit?

You will need to show that you have all the skills in the Unit.

You will carry out numeracy activities that involve:

- ◆ using numbers, carrying out calculations, and drawing conclusions from your answers
- ◆ creating, extracting, analysing, and interpreting information from tables, graphs, charts, or diagrams

Your tutor might watch you using numbers, doing calculations, using graphical information, and drawing conclusions from your answers. You could show your skills by writing or by telling your tutor your answers.

You can use a calculator or other electronic method to get your answers if you would usually do this.

What might this involve?

Here are examples of some things you might do:

- ◆ use data on size variations, on a random sample of products, to calculate 95% confidence limits on the mean weight of the products
- ◆ research and compare local and national data on children's health
- ◆ compare five-year returns on a series of cash and stock market investment products
- ◆ use a population-growth chart to forecast the need for secondary school places
- ◆ read weather maps to make decisions as to whether to postpone a planned sailing outing
- ◆ produce a series of charts to demonstrate staff turnover rates for jobs requiring different entry qualifications

What can I do next?

You could move on to 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

The work undertaken should involve activities set in unfamiliar situations where preliminary work needs to be done on gathering information and clarifying relationships between different pieces of information. Learners will be able to work with a high degree of independence and initiative.

At this level, learners will be working with a wide range of numerical or statistical skills, and complex graphical forms.

Using number

Learners must show that they can solve complex problems. The process of reaching a solution will have several stages, some of which will involve more than one numerical calculation.

Using graphical information

Learners must be able to create graphical forms and know the appropriate applications for them. Evidence of this for all of the graphical forms is not required.

A detailed knowledge is required of at least one type of complex graphical form. The learners must decide themselves on the appropriate graphical form to be used when representing information.

Learners can create or complete the graphical forms by hand or using computer software, so long as they understand the underlying concepts.

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.

ADMINISTRATIVE INFORMATION

Credit value

6 SCQF credit points (1 SQA credit) at SCQF level 6



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Helpdesk: 0845 279 1000
Fax: 0845 213 5000
E-mail: customer@sqa.org.uk
Website: www.sqa.org.uk

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|------------------------|-----------------------|
| Optima Building | Ironmills Road |
| 58 Robertson Street | Dalkeith |
| Glasgow | Midlothian |
| G2 8DQ | EH22 1LE |

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