

# Level 1 Essential Skills Wales in Application of Number (3768)

## Candidate logbook

500/7619/X



Your name:

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City & Guilds enrolment number:

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Unique Learner Number (ULN):

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Date of registration for 3768:

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Date portfolio started:

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Date portfolio completed:

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Assessor's name:

Internal verifier's name:

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# 1 How do I use this logbook?

This logbook will help you work towards Level 1 Essential Skills Wales in Application of Number. It contains:

- an **evidence record form** detailing the evidence you must provide to complete this qualification. You should use this to record and organise your evidence.
- a **skills checklist** containing all of the skills you need to have in order to show that you are competent. You can use this to help show how you have learnt and gained confidence in these skills.

The evidence and skills requirements for ESW are set out in full in the DCELLS document 'Essential Skills Wales'. This can be downloaded from [www.cityandguilds.com/esw](http://www.cityandguilds.com/esw). Your assessor/tutor will also be able to explain to you in more detail what you need to do.

## About ESW

The Essential Skills Wales (ESW) qualifications are designed to help you develop and demonstrate the skills needed to make the most of your learning, work and life.

This qualification will help you improve your **number** skills. You will be required to demonstrate your skills in:

- understanding numerical data
- carrying out calculations
- interpreting results and presenting findings

in order to tackle problems or tasks that you meet in education, training, work and social roles.

## About City & Guilds

City & Guilds is your awarding organisation for Essential Skills Wales. City & Guilds is the UK's leading awarding body for vocational qualifications. You may also be working towards other City & Guilds qualifications at the same time as completing ESW and in some cases you may be able to use work completed for those qualifications towards your ESW portfolio.

Information about City & Guilds and our qualifications is available on our website [www.cityandguilds.com](http://www.cityandguilds.com).

## 2 Level 1 Essential Skills Wales in Application of Number

### 2.1 Evidence record

Your portfolio must include **all** of the following. Please use this sheet to record what your evidence is and where it can be found. The Declarations on the following page **must** be completed.

Standard	Description of evidence presented	Location/reference	Confirmed met and date <i>(assessor use only)</i>
<b>N1.1.1</b> Understand and describe at least one given practical problem or task that involves a range of numerical data and information.			<input type="checkbox"/> $\geq 1$ problem described <hr/> <hr/>
<b>N1.1.2</b> Agree with an appropriate person how you will tackle it.			<input type="checkbox"/> contributed to deciding how to tackle <hr/> <hr/>
<b>N1.1.3</b> Obtain relevant numerical data and information from at least two sources to meet the purpose of your task. Your sources must include at least <b>one</b> of a table, a chart, a graph, or a diagram.			<input type="checkbox"/> relevant data/info obtained from $>1$ source <input type="checkbox"/> includes $\geq 1$ of table/chart/graph/diagram <hr/> <hr/>
<b>N1.2.1</b> Use appropriate methods to get the results you need and describe the methods you have used.			<input type="checkbox"/> $>1$ method used to get results needed <input type="checkbox"/> methods and purpose described <hr/> <hr/>
<b>N1.2.2</b> Use the data and information you have obtained to carry out calculations relevant to your task to do with: a) amounts or sizes b) scales or proportion c) handling statistics.			<input type="checkbox"/> relevant data/info from N1.1 used <input type="checkbox"/> amounts or sizes <input type="checkbox"/> scales or proportions <input type="checkbox"/> handling statistics <input type="checkbox"/> checked methods/calcs <input type="checkbox"/> results chkd for sense <hr/> <hr/>
<b>N1.3.1</b> Present your findings using charts, graphs or diagrams.			<input type="checkbox"/> findings presented using choice of $>1$ of chart/graph/diagram <input type="checkbox"/> includes $\geq 1$ diagram <input type="checkbox"/> accuracy checked <hr/> <hr/>
<b>N1.3.2</b> Describe what your results tell you and explain how they meet the purpose of your task.			<input type="checkbox"/> results described <input type="checkbox"/> purpose explained <hr/> <hr/>

## 2 Level 1 Essential Skills Wales in Application of Number

### 2.2 Declarations

The candidate and assessor declarations below **must** be completed in all cases.

Candidate name: \_\_\_\_\_

#### **Candidate declaration:**

I confirm that the evidence produced for this portfolio is entirely my own work.

Candidate signature: \_\_\_\_\_ Date: \_\_\_\_\_

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#### **Assessor declaration:**

I confirm that the candidate has met / not met (as applicable) all of the evidence requirements for this Essential Skills Wales qualification. Assessment is valid, authentic, reliable, current and sufficient.

Assessor signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### **Internal verifier declaration:**

*(if sampled)*

I confirm that the candidate has met / not met (as applicable) all of the evidence requirements for this Essential Skills Wales qualification. I have internally verified this work.

Internal verifier signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### **External verifier declaration:**

*(if sampled)*

I confirm that the candidate has met / not met (as applicable) all of the evidence requirements for this Essential Skills Wales qualification. I have externally verified this work.

External verifier signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 2 Level 1 Essential Skills Wales in Application of Number

### 2.3 Skills checklist

This checklist is designed to help you show you have learnt all of the skills needed for this qualification. Unlike the Evidence record, this list is not a formal part of your assessment although you and your assessor/tutor should be confident that you can do all of these things by the time you complete your portfolio.

<b>In order to show you are competent, you need to know how to:</b>	<b>Tick if you can</b>	<b>Further guidance</b>
a) check with an appropriate person that you understand the problem or task... a) ...and agree how you will tackle it	<input type="checkbox"/>  <input type="checkbox"/>	<p><b>Check</b> You must be able to show that you understand the problem or task that you have been given (eg by repeating it in your own words and/or asking for more detail).</p> <p><b>Agree</b> You must be able to discuss and agree with an appropriate person how to tackle a problem or task, i.e. you will make the decision jointly with a teacher, tutor or supervisor.</p>
a) read, understand and extract information from tables, diagrams, charts and simple graphs b) read and understand numbers presented in different ways, including large numbers in figures or words, simple fractions, decimals, percentages, ratios and negative numbers c) collect and record data from accurate observations d) read scales on familiar measuring equipment using everyday units e) use scales on diagrams to find and interpret information f) use shape and space to record measurements and make observations.	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<p><b>Read, understand, extract</b> You must know how to obtain information from:</p> <ul style="list-style-type: none"> <li>• tables, such as a timetable or pricelist</li> <li>• charts, such as a pictogram, pie chart or bar chart (eg to identify the number of items sold on a given day, the sales for a week or the day with the most sales)</li> <li>• single line graphs (eg to identify the temperature at given times of day, or the time of day when the temperature was highest or lowest) diagrams, such as a simple map, workshop drawing or plan using a scale such as 10mm = 1m.</li> </ul> <p><b>Read and understand numbers</b> You must know how to deal with numbers presented in different ways, eg write down spoken numbers such as 'one thousand and fifty', or 'three-fifths', recognise decimal fractions, know that one-third is a bit more than 30% or 0.3.</p> <p><b>Collect, record</b> You must know how to read numbers from scales on familiar measuring equipment (eg from a thermometer, tape measure, or measuring jug), and how to make accurate observations (eg when carrying out stock checks) using everyday units such as minutes, millimetres, litres, grams, degrees. You must record measurements and observations accurately and in a way that is fit for the purpose of your task.</p>
a) identify and use methods and calculations that are suitable for your task	<input type="checkbox"/>	<p><b>Identify methods and calculations</b> You must know how to select the method and calculation you need for a task, eg 'I must multiply these numbers' or 'I must divide by 100'.</p> <p><b>Describe</b> You must be able to make notes of or talk through your methods and what you did to achieve your purpose.</p>
a) work to the levels of accuracy you have been given b) add and subtract, with whole numbers and simple decimals with and without a calculator c) multiply and divide a simple decimal by a whole number, with and without a calculator	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<p><b>Carry out calculations</b> Application of Number requires you to show that you can carry out a number of different types of calculations (amounts or sizes; scales or proportion; handling statistics). 'Amounts or sizes' is a single category. 'Scales or proportion' is another single category. From each of these categories, you must present at least one example as evidence. You must be able to carry out calculations both with and</p>

In order to show you are competent, you need to know how to:	Tick if you can	Further guidance
d) recall multiplication facts to 10 x 10 and make connections with division facts e) understand and find simple fractions and percentages f) recognise equivalencies between common fractions, percentages and decimals, and use these to find proportions of whole numbers add, subtract, multiply, divide and record sums of money g) read, measure and record time in common date and time formats h) choose and use appropriate units and instruments to estimate, read, measure and compare length, weight, capacity, time and temperature i) calculate within a system by: – adding and subtracting common units of measure – converting units of measure in the system j) work out different properties of a variety of shapes, including perimeters, areas and volumes k) draw 2-D shapes in different orientations using grids l) use ratios and proportion m) use probability to show (using fractions, decimals and percentages) that some events are more likely to occur than others n) find the average (mean) of up to 10 items o) find the range for up to 10 items p) calculate efficiently using whole numbers, fractions, and decimals q) use different ways of checking your methods and calculations r) identify and correct any errors s) check that your results make sense.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>without a calculator.</p> <p><b>a) Amounts or sizes</b> You must know how to:</p> <ul style="list-style-type: none"> <li>carry out calculations using: <ul style="list-style-type: none"> <li>simple decimals – in the context of everyday tasks such as dealing with money, or measuring using metric units, eg how to multiply and divide decimals by 10, 100 and 1000, with and without a calculator</li> <li>simple fractions and percentages – how to find parts, such as two-thirds or three-quarters, of whole number amounts or measurements, and find percentages, including how to work out increases in amounts (eg a 10% rise in cost) and decreases in amounts (eg a 20% discount)</li> <li>areas and volumes – eg how to find a rectangular area in <math>m^2</math> or the volume of a box in <math>cm^3</math></li> </ul> </li> <li>convert within a system, eg convert 70 minutes to 1 hour 10 minutes, 0.36 metres to 360mm, 0.6 hours to 36 minutes.</li> </ul> <p><b>b) Scales or proportion</b></p> <ul style="list-style-type: none"> <li>You must know how to use simple scales on diagrams to work out actual measurements.</li> <li>When working with proportions, you must know how to increase and reduce whole-number amounts using ratio and direct proportion, eg scale up amounts of food for three times the number of people or put items in two piles, one with twice as many items as the other.</li> </ul> <p><b>c) Handling statistics</b> You must know how to calculate the range and the mean of a group of up to 10 numbers.</p> <p><b>Levels of accuracy</b> You must know how to work to levels of accuracy given by a teacher, tutor or trainer, such as the nearest 10p or nearest hundredth, and to round results.</p> <p><b>Check calculations</b> You must always check the accuracy of your calculations. This is often a mental process and you do not have to produce evidence every time you do it. Where there is a series of calculations of the same type, you must record evidence of how you have checked at least the first few of each type. For the remainder, accurate results must confirm that you have checked effectively. You must be aware of the importance of checking your results and be familiar with different methods of carrying out checks.</p> <p><b>Check that results make sense</b> While a calculation may be accurate, it may not 'make sense' or be fit for purpose in relation to the problem or task that you have tackled. You must check this.</p>
a) interpret the results of your calculations b) show how your results relate to your problem or task c) identify and describe more than one appropriate way to present your findings to a familiar given audience, including using charts or diagrams d) using the correct units, use appropriate ways to present your findings, including a chart or graph, and a diagram e) label your work correctly	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p><b>Choose, use, present</b> You must be able to identify more than one way to present your findings, and to choose for yourself which is/are the most suitable for your purpose, eg as discrete data in a bar chart, or in a diagram such as a plan of a room or piece of equipment. This does not mean that you have to present the same finding in two different ways, but that, in your work as a whole, you must use two different ways of presenting your findings.</p>

In order to show you are competent, you need to know how to:	Tick if you can	Further guidance
f) describe what your results tell you and explain how they meet the purpose of your task.	<input type="checkbox"/>	<p><b>Describe and explain</b></p> <p>You must know how to describe what the results of your calculations show in relation to the problem you have tackled, eg show that the results of your calculations suggest that a proposed solution will not work.</p>

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**Published by City & Guilds**  
**1 Giltspur Street**  
**London**  
**EC1A 9DD**  
**T +44 (0)844 543 0033**  
**F +44 (0)20 7294 2413**  
**[www.cityandguilds.com](http://www.cityandguilds.com)**

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