

Level 2 Essential Skills Wales in Application of Number (3768)

Candidate logbook

500/7620/6



Your name:

City & Guilds enrolment number:

Unique Learner Number (ULN):

Date of registration for 3768:

Date portfolio started:

Date portfolio completed:

Assessor's name:

Internal verifier's name:

1 How do I use this logbook?

This logbook will help you work towards Level 2 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. 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.

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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 page 5 **must** be completed

Standard	Description of evidence presented	Location/reference	Confirmed met and date (assessor use only)
Overall You must carry out at least one activity that shows your skills in all three components (N2.1, N2.2, N2.3). If you need to carry out additional activities to meet all of the requirements for N2.2 (a, b, c, d) each activity must include tasks for either N2.1 and N2.2 or N.2.2 and N2.3.			<input type="checkbox"/> ≥ 1 task covers all three components <input type="checkbox"/> all cover >1 component <hr/> <hr/>
N2.1.1 Help to identify and describe at least one practical problem or task that involves a range of numerical data and information.			<input type="checkbox"/> ≥ 1 prob ID/described <hr/> <hr/>
N2.1.2 Confirm with an appropriate person how you plan to tackle it.			<input type="checkbox"/> plan devised/confirmed <input type="checkbox"/> includes how to obtain relevant data/info and sequence for use <hr/> <hr/>
N2.1.3 Collect relevant numerical data and information from a range of sources to meet the purpose of your task. Your sources must include at least two of a table, a chart, a graph or a diagram.			<input type="checkbox"/> relevant data/info collected from ≥ 3 sources <input type="checkbox"/> ≥ 1 source collected/recorded by candidate <input type="checkbox"/> includes ≥ 2 of table/chart/graph/diagram <hr/> <hr/>
N2.2.1 Use appropriate methods to get the results you need and explain the methods you have used.			<input type="checkbox"/> >1 method used to get results needed <input type="checkbox"/> methods and purpose explained <hr/> <hr/>
N2.2.2 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 d) using formulae.			<input type="checkbox"/> relevant data/info from N2.1 used <input type="checkbox"/> amounts or sizes <input type="checkbox"/> scales or proportions <input type="checkbox"/> handling statistics (incl. data set comparison) <input type="checkbox"/> using formulae <input type="checkbox"/> purpose/relevance of calcs understood <input type="checkbox"/> checked methods/calcs <input type="checkbox"/> results chkd for sense <hr/> <hr/>

Standard	Description of evidence presented	Location/reference	Confirmed met and date <i>(assessor use only)</i>
<p>N2.3.1 Select two different ways to present your results, using charts or graphs, and tables or diagrams appropriate to your audience.</p>			<input type="checkbox"/> ≥ 1 of chart/graph selected <input type="checkbox"/> ≥ 1 of table/diagram selected <input type="checkbox"/> appropriateness explained <hr/> <hr/>
<p>N2.3.2 Present and explain your methods and findings and explain how they meet the purpose of your task and are appropriate to your audience.</p>			<input type="checkbox"/> methods/findings explained effectively <input type="checkbox"/> meaning described/ explained in relation to problem with key points emphasised <hr/> <hr/>

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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: _____

For centre staff and City & Guilds' use only

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: _____

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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.

In order to show you are competent, you need to know how to:	Tick if you can	Further guidance
a) Work with an appropriate person to help you identify and describe the problem or task... a) ...and confirm how you will tackle it	<input type="checkbox"/> <input type="checkbox"/>	<p>Help to identify While your teacher/tutor/trainer is likely to give you the outline of a problem or task, you must take part in discussions to help clarify and describe it in detail. If you choose to tackle a problem of your own, rather than one given by your teacher/tutor/trainer, you must take their advice about whether your chosen problem is appropriate.</p> <p>Confirm with an appropriate person It is your responsibility to think about how you will tackle the problem but you must check with your teacher/tutor/trainer that your plan is a good one.</p>
a) read, understand and extract information from tables, diagrams, charts, and simple graphs b) read and understand numbers presented in different ways collect and record data from making accurate observations c) read scales on a range of equipment to given levels of accuracy d) use shape and space to record relevant measurements and make accurate observations e) estimate amounts and proportions f) understand compound measures.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Collect, record You must know how to use suitable equipment for making accurate measurements and observations, as well as how to interpret a variety of numerical, written and graphical material, including tables and charts, in order to decide about their relevance to the purpose of your activity. You must record measurements and observations accurately and in a way that is fit for the purpose of your task.</p> <p>Sources Sources can include graphical and/or written material (eg reference books and journals; organisations that collate their own statistical information; the internet; and newspapers) and/or direct measurements or observations, depending on the context in which you are working. This material must include at least two of: a table, a chart, a simple graph, or a diagram. You must be able to read scales, such as 1:2500 on a map.</p> <p>Compound measures You must know how to interpret compound measures (eg those presented as 'something per something' such as milligrams per 100 millilitres, pressure in psi, or miles per hour).</p>
a) identify and use methods and calculations that are appropriate for your task, including grouping data when this is appropriate	<input type="checkbox"/>	<p>Identify and use methods You must consider a range of possible methods (eg look up formulae/ information relating to similar tasks or problems), weigh up the pros and cons of alternatives, and choose methods that are appropriate for your purpose and circumstances.</p>
a) show clearly your methods of carrying out calculations and give the levels of accuracy of your results • carry out calculations involving two or more steps, with numbers of any size, with and without a calculator b) use mental arithmetic involving whole numbers and simple fractions c) work with, and convert between, fractions, decimals and percentages d) calculate with sums of money and convert between currencies	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Carry out calculations 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; using formulae). '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 without a calculator. You must show that you can carry out calculations involving two or more steps when working with:</p>

In order to show you are competent, you need to know how to:	Tick if you can	Further guidance
<p>e) calculate, measure and record time in different formats</p> <p>f) estimate, measure and compare length, weight, capacity and temperature using metric and, where appropriate, imperial units calculate within a system and between systems using conversion tables and scales, and approximate conversion factors</p> <p>g) recognise and use common 2-D representations of 3-D objects</p> <p>h) solve problems involving 2-D shapes and parallel lines</p> <p>i) work out actual dimensions from scale drawings</p> <p>j) use proportions and calculate using ratios where appropriate</p> <p>k) identify the range of possible outcomes of combined events through probability and record the information using diagrams or tables</p> <p>l) compare sets of data of an appropriate size, using percentages, mean/median/mode</p> <p>m) use range to describe the spread within sets of data</p> <p>n) understand and use given formulae</p> <p>o) calculate efficiently using whole numbers, fractions, decimals and percentages</p> <p>p) check your methods and calculations</p> <p>q) identify and correct any errors</p> <p>r) check that your results make sense.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>a) amounts or sizes, eg when solving problems that involve converting between fractions, decimals and percentages, different currencies or systems of measurement; evaluating one number as a fraction or percentage of another; working out volumes and areas of composite shapes</p> <p>b) scales or proportion, eg when enlarging shapes by using a positive whole number scale factor, calculating ratios such as sharing £60 in the ratio 3:5</p> <p>c) statistics, eg when finding the mean, median and mode (eg from charts showing two weeks' sales results), and using them to compare two sets of data; finding the range and using it to describe the spread within sets of data</p> <p>d) formulae, eg when using given formulae expressed in words, as rules (eg 'length in using symbols (eg cm \div 2.54 = l)).</p> <p>Levels of accuracy You must decide what levels of accuracy to work to (eg nearest whole number, nearest pound, one place of decimals, etc.) and state what they are.</p> <p>Sets of data The data sets you work with must be of a size that is appropriate to your task/activity and its purpose. They must be large enough to enable you to make meaningful calculations of mean and/or median and/or mode, and to make meaningful comparisons.</p> <p>Understand and use given formulae You must know how to use formulae that you are given by, for example, substituting values. You do not have to create or rearrange formulae.</p> <p>Check calculations 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 checking 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 methods, and be familiar with different methods of carrying out checks.</p> <p>Check that results make sense While your results may be based on accurate calculations, they 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>
<p>a) understand what the results of your calculations mean in the context of your problem or task</p> <p>b) identify and describe appropriate ways to present your findings to two different audiences, including numerical, graphical and written formats</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Select ways to present You must be able to identify, describe and consider different ways to present your results (eg graphs, charts, tables, diagrams) to at least two different audiences. You must choose and use the two ways (ie charts and/or graphs, and tables and/or diagrams) that are most appropriate to your actual audience, and explain your choice. Evidence that you have considered different ways and that explains your choice must be in the form of notes, written by hand or electronically.</p>
<p>a) construct tables, charts and graphs, and label with titles, scales, axes and keys appropriate to your purpose and audience</p> <p>b) use more than one way to present your findings, including numerical, graphical and written formats</p> <p>c) describe your methods, highlight the main points of your findings, and explain how they meet your purpose.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Present, describe and explain You must be able to describe your methods and explain how they meet your purpose.</p> <p>Highlight main points You must present your findings in ways that make it easy for your audience to identify the main points.</p>

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