# GCSE Mathematics and Numeracy (Double Award) Qualification Outline – Consultation Version

# Introduction

This document provides a high-level overview of the proposed WJEC GCSE Mathematics and Numeracy (Double Award) Qualification.

It is based on Qualifications Wales's Approval Criteria (key sections are included in Appendix 1). Our qualification **must** meet these requirements.

The qualification outline will provide a guide for the development of the Specification and Sample Assessment Materials (SAMs).

# Qualification Overview

The construct of GCSE Mathematics and Numeracy (Double Award) is based on the five interdependent proficiencies that make up the Curriculum for Wales' principles of progression for the Mathematics and Numeracy Area.[1] The qualification will:

- provide opportunities for learners to develop a conceptual understanding of mathematical concepts and ideas
- provide opportunities for learners to develop an understanding of a wide range of mathematical language and to demonstrate this communication using symbols
- allow learners to demonstrate the use and application of mathematical and numerical skills fluently and accurately
- support leaners to develop and apply logical reasoning when justifying and proving relationships between concepts
- provide opportunities for learners to independently demonstrate strategic competence when using mathematical ideas to solve problems.

The content of GCSE Mathematics and Numeracy (Double Award) qualification will be based on the following mathematical and numerical concepts that make up the Curriculum for Wales' statements of what matters for the Mathematics and Numeracy Area[2]:

- Number
- Algebra
- Geometry and measures
- Statistics and probability

Aspects of each concept will be explored in every unit of the qualification, supporting the statement that 'the different areas of mathematics are highly interconnected and dependent on one another' included in the specific considerations for this Area.[3]

The qualification will also support key links with other Areas of the Curriculum for Wales, including developing learners' financial literacy in support of learner wellbeing.

[1] https://hwb.gov.wales/curriculum-for-wales/mathematics-and-numeracy/principles-of-progression/

[2] https://hwb.gov.wales/curriculum-for-wales/mathematics-and-numeracy/statements-of-what-matters/

[3] https://hwb.gov.wales/curriculum-for-wales/mathematics-and-numeracy/designing-your-curriculum/#specific-considerations-for-this-area

## Proposed Qualification Structure

| |
|---|
| **Unit 1: Financial Mathematics and Other Applications of Numeracy**<br>Written examination<br>30% of qualification |
| **Unit 2: Non-calculator Mathematics**<br>**Written examination**<br>**30% of qualification** |
| **Unit 3: Calculator Mathematics**<br>Written examination<br>40% of qualification |

This will be a unitised qualification.

There is no hierarchy implied by the order in which the units are presented. Therefore, the order does not imply a prescribed teaching order.

## Unit Information

### Unit 1: Financial Mathematics and Other Applications of Numeracy

**The purpose of this unit is to:**

- **introduce and develop learners' understanding of topics and concepts relating to finance and to support learners' confidence in relation to financial wellbeing**
- **allow learners to use their knowledge and apply mathematical methods to personal, real-world contexts, including those related to money and the workplace.**

The focus of the assessment in this unit will be on some aspects of statistics and algebra, and the numeracy aspects of measures and number (including personal finance), in line with the subject content outlined in Qualifications Wales's Approval Criteria.[4]

The examination will include a mix of question types that target AO1, AO2 and AO3, and the weighting across assessment objectives will be as follows:

| | AO1 | AO2 | AO3 | Total |
|---|---|---|---|---|
| **Unit 1** | 10.5% | 13.5% | 6% | 30% |

The duration of the examination is likely to be 1 hour 45 minutes at higher tier and 1 hour 30 minutes at foundation tier.

There will be no optionality in this unit.

[4] gcse-mathematics-and-numeracy-approval-criteria.pdf (qualifications.wales)

## Unit 2: Non-calculator Mathematics

**The purpose of this unit is to:**

- **explore topics and concepts that are most appropriately assessed without a calculator.**

The focus of the assessment in this unit will be on non-calculator number work, algebra, geometry and probability, in line with the subject content outlined in Qualifications Wales's Approval Criteria.

The examination will include a mix of question types that target AO1, AO2 and AO3, and the weighting across assessment objectives will be as follows:

| | AO1 | AO2 | AO3 | Total |
|---|---|---|---|---|
| **Unit 2** | 19.5% | 4.5% | 6% | 30% |

The duration of the examination is likely to be 1 hour 45 minutes at higher tier and 1 hour 30 minutes at foundation tier.

There will be no optionality in this unit.

## Unit 3: Calculator Mathematics

**The purpose of this unit is to:**

- **explore topics and concepts that are most appropriately assessed with a calculator.**

The focus of the assessment in this unit will be on elements of number, geometry, measures and algebra that require a calculator, and statistics, in line with the subject content outlined in Qualifications Wales's Approval Criteria.

The examination will include a mix of question types that target AO1, AO2 and AO3, and the weighting across assessment objectives will be as follows:

| | AO1 | AO2 | AO3 | Total |
|---|---|---|---|---|
| **Unit 3** | 20% | 12% | 8% | 40% |

The duration of the examination is likely to be 2 hours at higher tier and 1 hour 45 minutes at foundation tier.

There will be no optionality in this unit.

## Availability of first assessment and first award

Units 1 and 2 will be available for the first time in summer 2026 and will then be available every summer and November exam series. This will give centres the flexibility to decide on their preferred order of teaching the qualification content, and if learners take one unit before the other, which one of these units is taken first.

Unit 3 will then be available for the first time either in November 2026 or summer 2027.

Option 1 would allow WJEC to award the qualification for the first time in November 2026.

Option 2 would allow WJEC to award the qualification for the first time in summer 2027.

| | **Unit 1** | **Unit 2** | **Unit 3** |
|---|---|---|---|
| **Option 1** | First available summer 2026 | First available summer 2026 | First available November 2026 |
| **Option 2** | First available summer 2026 | First available summer 2026 | First available summer 2027 |

After the first award, all three units will be available in November and summer sessions.

## Approach to tiering

The Approval Criteria for GCSE Mathematics and Numeracy states that:

12. The assessments for the GCSE Mathematics and Numeracy (Double Award) qualification must allow Learners to achieve the following grades in each tier:
    12.1. higher tier – A*-D
    12.2. foundation tier – C-G

All three units will have a higher tier and a foundation tier. WJEC will allow a mixed tier approach, where learners can be entered for different tiers in each unit. This will support centres to make the most appropriate decisions when entering learners for assessment and ensure that learners are not inappropriately capped as they mature and progress over the two-year course. This approach supports the Curriculum for Wales' aspirations to develop ambitious learners.

## Consideration of manageability, engagement, reliability and validity

In developing this proposed qualification outline, we have considered manageability, engagement, reliability and validity, and how to balance these considerations in the context of the requirements of the Approval Criteria.

Building on the Approval Criteria's requirement for the qualification to have a unitised structure, the decision to make the examinations for all units available twice a year allows centres significant flexibility to spread the assessment burden over the two-year course and for learners to complete units whenever they are ready. By having this unit available each summer and November series, this also allows for learners to re-sit units during the course if necessary. Decisions in relation to the timing of these examinations have also been made to make sure that assessment of the GCSE is manageable for the proportion of these learners who will want to move on to Level 2 Additional Mathematics during year 11.

Reducing the number of assessments from four in the current GCSEs (two in GCSE Mathematics and two in GCSE Mathematics-Numeracy) to three in the new double award addresses risks of over-assessing learners and reduces the potential impact of assessment on learner wellbeing. Presenting a unit that focuses on financial mathematics provides content that is relevant and purposeful for learners' futures, and this sense of relevance will be further enhanced by framing examination paper questions within the engaging contextual categories set out in section 14 of the Approval Criteria. Including a mix of question types within each examination will also contribute to sustaining learner interest. Allowing learners to be entered at different tiers for different units will ensure that they are not capped at an early point during the course and will promote learner ambition.

We believe that the purpose and content of the qualification can be validly assessed by examination, and a mix of question types can help us maximise validity. When we develop assessments, we will ensure that all tasks target the relevant construct, that there is an appropriate balance of content covered over time and that there is alignment between assessment items and learning outcomes. Where appropriate we will use data available to us on how an assessment has functioned. To ensure reliability, we will make sure that the units target the same assessment objective weightings and have a consistent level of demand each series, marking criteria will be developed and assessors will be trained on how to apply them consistently.

We will continue to consider manageability, engagement, reliability and validity, at each stage of qualification development.

# Appendix 1

## Key information from Approval Criteria

The following information has come directly from Qualifications Wales's GCSE Mathematics and Numeracy (Double Award) Approval Criteria - our qualification must meet these requirements.

### Purpose

1. **GCSE Mathematics and Numeracy (Double Award)** must:
   - 1.1 be designed primarily for *Learners* between the ages of 14 and 16
   - 1.2 build on the conceptual understanding *Learners* have developed through their learning from ages 3-14
   - 1.3 support teaching and learning by providing appropriately broad, demanding, relevant and engaging content and assessment that relates to and supports the Curriculum for Wales, including its four purposes
   - 1.4 allow *Learners* to develop a strong foundation of knowledge, skills and understanding which supports progression to post-16 study and prepares them for life, learning and work
   - 1.5 provide meaningful, fair and accurate information on *Learner* achievement within a subject that highlights what *Learners* know, understand and can do

### Aims

2. **GCSE Mathematics and Numeracy (Double Award)** must:
   - 2.1. allow *Learners* to explore a range of knowledge, skills and understanding in relation to mathematics and numeracy
   - 2.2. provide opportunities for *Learners* to be assessed in a variety of relevant and meaningful contexts

3. The **GCSE Mathematics and Numeracy (Double Award)** qualification must support *Learners* to:
   - 3.1. make connections between different areas of mathematics and with other areas of the curriculum
   - 3.2. develop their conceptual understanding in explaining, expressing and representing concepts in both concrete and abstract forms
   - 3.3. communicate both abstract situations and real-world contexts using mathematical symbols and expressions
   - 3.4. develop their ability to use mathematical facts, techniques and relationships fluently to solve problems
   - 3.5. recognise underlying mathematical structures within problems and develop strategies to solve them
   - 3.6. develop an understanding of relationships between mathematical concepts and the use of justifications and proofs
   - 3.7. gain a strong foundation in financial mathematics to equip them for life and work
   - 3.8. develop confidence in using and applying digital technology to help solve mathematical and statistical problems

## Assessment Objectives

8. The assessment of the knowledge, understanding and skills required in the qualification must target the following assessment objectives in line with the indicated weightings, within a tolerance of +/- 5 percentage points.

| | | |
|---|---|---|
| **AO1** | **Recall and use their knowledge of the prescribed content:**<br>• demonstrate conceptual understanding through remembering and using mathematical facts, relationships, concepts and techniques<br>• follow direct instructions to solve problems involving routine procedures fluently | 50% |
| **AO2** | **Select and apply mathematical methods:**<br>• select and use the mathematics and resources needed to solve a problem fluently<br>• select and apply mathematical methods to solve non-standard or unstructured, multi-step problems fluently<br>• make decisions when tackling a given task, for example, choosing how to display given information<br>• communicate mathematically, using a wide range of mathematical language, notation and symbols to explain reasoning and to express mathematical ideas unambiguously | 30% |
| **AO3** | **Demonstrate strategic competence by making connections between different aspects of mathematics and using mathematical skills in unfamiliar contexts:**<br>• demonstrate strategic competence by interpreting and analysing problems and generating strategies to solve them<br>• devise strategies to solve non-routine or unfamiliar problems, breaking them into smaller, more manageable tasks where necessary<br>• construct arguments and proofs using logical reasoning and deduction<br>• interpret findings or solutions in the context of the original problem<br>• use inferences and deductions made from mathematical information to draw conclusions<br>• reflect on and justify results, and evaluate the methods employed | 20% |

## Scheme of assessment

9. The **GCSE Mathematics and Numeracy (Double Award)** qualification must be unitised.

11. The **GCSE Mathematics and Numeracy (Double Award)** qualification must be tiered.

12. The assessments for the **GCSE Mathematics and Numeracy (Double Award)** qualification must allow Learners to achieve the following grades in each tier:
    a. higher tier – A*-D
    b. foundation tier – C-G

13. The **GCSE Mathematics and Numeracy (Double Award)** specification must include the following assessment arrangements:
    13.1. a total of 100% of the qualification must be assessed by external examination, with an examination series available in November and the summer

13.2. one or more Units must be available before the summer of Year 11 for the first cohort of Learners taking the qualification
13.3. assessments must include a mixture of item types in the examinations:
13.3.1. some questions must include the application of content in context and other questions must be context free
13.3.2. there must also be a mixture of calculator and non-calculator questions

14. The following contextual categories must be used in the examinations to ensure a range of contexts are covered:
14.1. personal contexts which could include but are not limited to:
14.1.1. personal finance
14.1.2. personal health
14.1.3. travel
14.2. careers, employment and work-based contexts which could include but are not limited to:
14.2.1. timekeeping
14.2.2. payroll
14.2.3. finances
14.3. societal contexts which could include but are not limited to:
14.3.1. economy
14.3.2. demographics
14.4. scientific, technological and environmental contexts could include but are not limited to:
14.4.1. climate
14.4.2. medicine
14.4.3. computing