Guidelines for the Form 4 Mathematics Core Curriculum Programme

The Core Curriculum programme (CCP) for Mathematics targets low ability secondary school students who need support to attain Level 1 of the Malta Qualifications Framework by the end of compulsory schooling.

Assessment for the CCP

Assessment for the Form 4 CCP will be 25% **Summative** and 75% **Continuous**.

**Summative** Assessment

The summative assessment has a weighting of 25% of the final mark.

The summative assessment consists of a school-set half-yearly and a centrally-set annual examination. Both exams will have the same weighting. In both exams, students sit for a 15 minute non-calculator paper (25 marks) and a 45 minute main paper (75 marks).

**Continuous** Assessment

The continuous formative assessment has a weighting of 75% of the final mark.

The teacher sets a number of tasks linked with the Learning Outcomes in the four strands, (Number; Shape Space and Measurement; Algebra; Data Handling). These are accessible online, http://curriculum.gov.mt/en/Curriculum/Form-3-to-5/Pages/default.aspx. These tasks are to be spread out over the whole scholastic year, the best of which are to be used for assessment purposes.

**Half yearly continuous assessment mark**: This is based on two compulsory tasks and three teacher-prepared tasks for a total of 50 marks.

**Annual continuous assessment mark**: This is based on four compulsory tasks (two of which are set before the half yearly) and six teacher-prepared tasks for a total of 100 marks.

Compulsory tasks will be provided by the Mathematics Department and will be common for all Form 4 CCP students.

**Examples of tasks:**

- Practical tasks – such as estimating and measuring length, weight, capacity and time; selecting the appropriate apparatus for a particular use; handling money and change.
- Presentations – ability to present work orally or with the aid of charts etc.
- Collaborative activity – a task carried out in small groups e.g. oral quizzes, problem solving, projects.
- Computer activity – RLOs, games, simple logo drawings.
- Oral testing.
- Model making – flat and solid shapes.
- Field activities such as Maths Trails.

Evidence of the assigned tasks are to be kept by the class teacher in individual student files.
To guarantee a level playing field, tasks chosen for assessment will be assessed using a standard common rubric that gives credit to a number of aspects which include active participation, understanding of the context of the problem, mathematical knowledge and skills, level of reasoning, accuracy of the results, and completeness. The following general rubric can be used to assess these tasks:

<table>
<thead>
<tr>
<th></th>
<th>0 marks</th>
<th>1/2 marks</th>
<th>3/4 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest / Participation</strong></td>
<td>• Shows no interest&lt;br&gt;• Refuses to participate</td>
<td>• Shows some interest&lt;br&gt;• Participates occasionally</td>
<td>• Is interested&lt;br&gt;• Active participation</td>
</tr>
<tr>
<td><strong>Context</strong></td>
<td>• No comprehension of the context in which the problem is situated</td>
<td>• Some aspects of context are understood</td>
<td>• Relevant aspects of context are understood</td>
</tr>
<tr>
<td><strong>Maths: Knowledge and Skills</strong></td>
<td>• No relevant response or response has major errors&lt;br&gt;• Omits significant parts or all the questions</td>
<td>• Contains an incomplete response and/or carries out mathematical responses with errors&lt;br&gt;• Explanation is muddled&lt;br&gt;• Shows some understanding of mathematical concepts</td>
<td>• Contains a complete response; mathematical responses are carried out correctly and completely&lt;br&gt;• Satisfies the requirements of the immediate problem</td>
</tr>
<tr>
<td><strong>Maths reasoning</strong></td>
<td>• No logical reasoning</td>
<td>• Explanations/arguments partly correct or unclear&lt;br&gt;• Inconsistent analyses and interpretation&lt;br&gt;• Needs help in identifying a strategy</td>
<td>• Able to reach a consistent conclusion without contradiction&lt;br&gt;• Attempts supporting arguments&lt;br&gt;• Consistent analyses and appropriate interpretation&lt;br&gt;• Uses at least a single strategy</td>
</tr>
<tr>
<td><strong>Maths communication accuracy and completeness</strong></td>
<td>• Uses no mathematical language or notation&lt;br&gt;• No charts or tables in presentations.&lt;br&gt;• Cannot follow explanation&lt;br&gt;• Incorrect conclusions&lt;br&gt;• Incomplete work</td>
<td>• Some attempt to make use of mathematical language and notation&lt;br&gt;• Attempt to use representations in the presentation&lt;br&gt;• Explanation is tedious to follow&lt;br&gt;• Partially correct&lt;br&gt;• Work partially done</td>
<td>• Uses correct mathematical language&lt;br&gt;• Uses correct representations&lt;br&gt;• Uses appropriate explanations&lt;br&gt;• Correct conclusions&lt;br&gt;• Work is complete</td>
</tr>
</tbody>
</table>

Divide total marks by 2 and round up to the nearest whole number. Final assessment mark for each task will be out of 10.

All students’ marks will be recorded and kept by the class teacher.
Computation of the **Half Yearly final mark** for Form 4 CCP Mathematics

The **Half Yearly exam mark** is out of 100 and the **Continuous Assessment** is out of 50, i.e. five tasks, each out of 10.

**Half Yearly final mark** = \((0.25 \times \text{Half Yearly exam mark}) + (1.5 \times \text{Continuous Assessment})\)

<table>
<thead>
<tr>
<th>Mark</th>
<th>Grade</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 - 100</td>
<td>MO</td>
<td>Mastered expected learning outcomes</td>
</tr>
<tr>
<td>51 - 79</td>
<td>P</td>
<td>Partially achieved expected learning outcomes</td>
</tr>
<tr>
<td>31 - 50</td>
<td>S</td>
<td>Starting to work towards expected learning outcomes</td>
</tr>
<tr>
<td>1 - 30</td>
<td>WB</td>
<td>Working below the expected learning outcomes</td>
</tr>
</tbody>
</table>

E.g. Student X: Half Yearly Mark is 58/100; Continuous Assessment is 36/50.

Final Half Yearly Mark = \((0.25 \times 58) + (1.5 \times 36) = 68.5\)

So final grade for **Half Yearly Maths** is P, (Partially achieved expected learning outcomes)

Computation of the **Annual Final mark** for Form 4 CCP Mathematics

Both the half yearly and the annual examinations are out of 100. The continuous assessment mark is also out of 100, i.e. ten tasks, each out of 10. Then the Annual Final Mark will be computed as follows:

**Final Mark** = 0.125 \(\times\) (Half yearly exam mark + Annual exam mark) + 0.75 \(\times\) Continuous Assessment

E.g. Student X: Half Yearly mark is 58/100; Annual mark is 65/100; continuous assessment is 72/100.

Final Mark = 0.125 \(\times\) (58 + 65) + 0.75 \(\times\) 72 = 69.375

So final grade for **Annual Maths** in form 4 is P, (Partially achieved expected learning outcomes)

Conversion of the final mark into a Grade in form 4 for the Mathematics component of the CCP