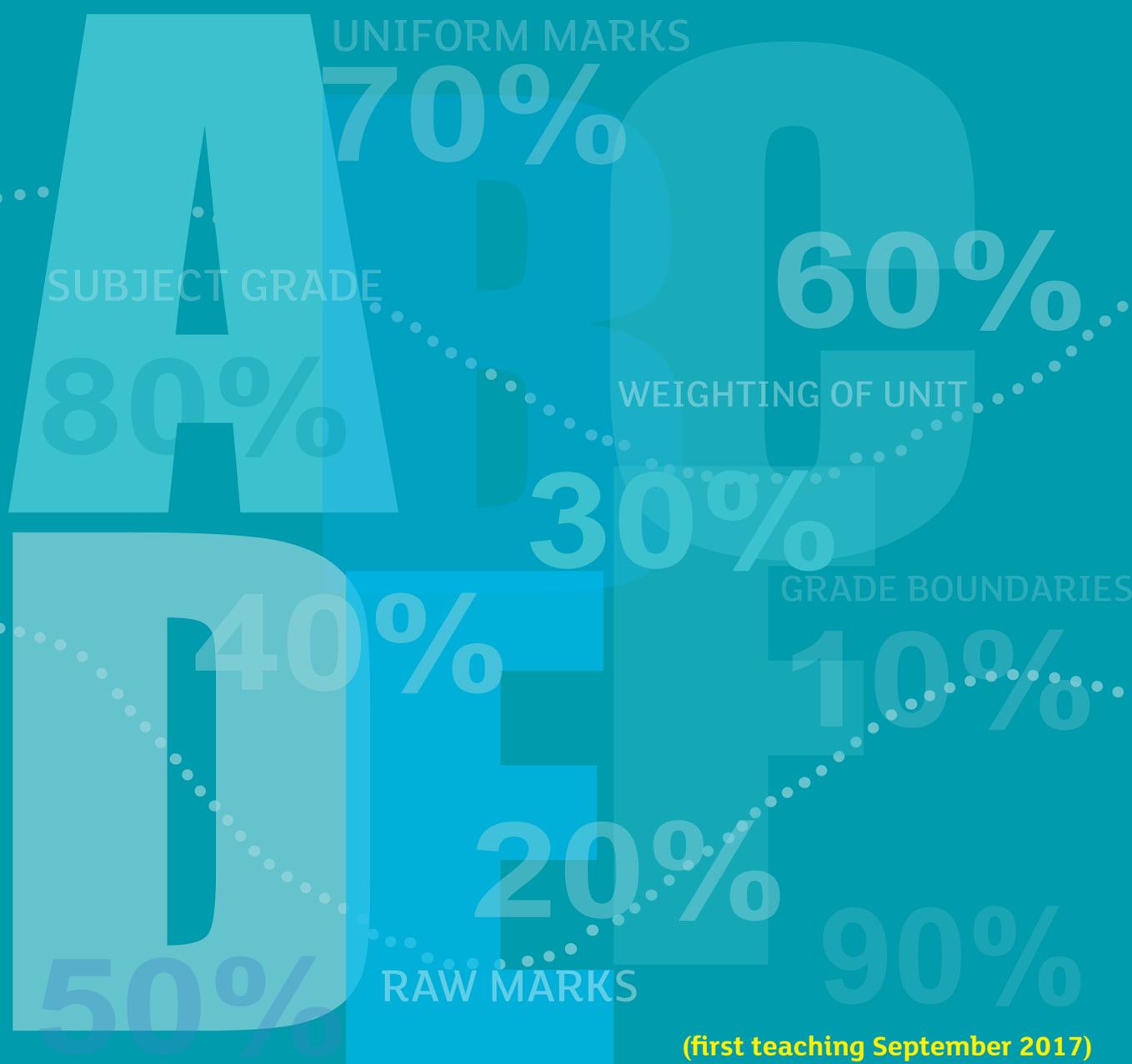


Setting Grade Boundaries and Awarding Grades in Revised CCEA Unitised GCSE Qualifications



Background

Unitised qualifications are designed to be taken in 'chunks' or units. As a candidate sits each unit, the marks are accumulated. When the candidate cashes-in, the marks from each unit are aggregated (added up) and an overall subject grade awarded. Since exam papers can vary in difficulty from one examination series to the next, a common scale is used (called the uniform mark scale or UMS) to ensure candidates who sit an easier paper are not advantaged over candidates who sit a more demanding paper.

For most of CCEA's GCSEs, the total number of uniform marks (um) available in each qualification is 400um. The number of uniform marks allocated to each unit in the qualification is determined by the percentage weighting of the unit. For example if a unit is worth 35% of the qualification then it is allocated a total of 140um (35% of 400um = 140um).

Table 1 shows the number of uniform marks allocated to each unit of a revised GCSE qualification worth 400um.

Unit	% Weighting of unit	Number of uniform marks allocated to unit
1	35%	140
2	40%	160
3	25%	100
		Total = 400

Table 1

Setting Grade Boundaries in Units

1. For each unit, grade boundaries are initially set in 'raw' marks. The number of raw marks is the number of actual marks on the examination paper.
2. Key raw mark boundaries are set first. This is done using a combination of examiner judgement and statistical information. At GCSE, the key grade boundaries are A/B, C/D and F/G. The other raw mark grade boundaries (B/C*, C*/C, D/E, E/F, G/U) are set using a calculation. Raw mark grade boundaries may vary year on year depending on the demand of the examination paper.
3. Once all the raw mark boundaries have been set, they are 'mapped' onto uniform mark boundaries. The uniform mark boundaries are set at fixed percentages. These percentages do not change year on year. In revised GCSEs the uniform mark boundaries are set at the following percentages:

Uniform mark grade boundary	% of uniform marks
A	80%
B	73%
C*	67%
C	60%
D	50%
E	40%
F	30%
G	20%

Table 2

4. Once the raw mark boundaries have been mapped to uniform mark boundaries, each raw mark is converted to a uniform mark. Table 3 shows how this is done for a revised GCSE unit worth 30%.

Revised GCSE Unit with a weighting of 30%		
Total raw marks in examination = 100		
Total uniform marks for unit = 120 (30% of 400um)		
Unit grade boundary	Raw mark boundary	Uniform mark boundary
A	71	96 (80% of 120)
B	63	88 (73% of 120)
C*	56	81 (67% of 120)
C	49	72 (60% of 120)
D	43	60 (50% of 120)
E	38	48 (40% of 120)
F	33	36 (30% of 120)
G	28	24 (20% of 120)

Raw to uniform mark conversion

49 raw marks maps to 72 uniform marks

43 raw marks maps to 60 uniform marks

$12\text{um} (72-60) \div 6 \text{ raw marks } (49-43) = 2$

Therefore the raw to uniform mark conversion for the raw mark range 44 to 49 is 1 raw = 2um

Similar calculations are carried out between the other adjacent grade boundaries.

Table 3

5. For each unit candidates are awarded a 'notional' grade based on their uniform mark. For example a candidate who scored a uniform mark of 89 in the unit shown in Table 3 would be awarded a notional B grade.
6. Please note that at unit level, notional A* grades are not awarded. The A* subject grade will be awarded when candidates cash-in. The maximum notional grade a candidate can achieve at unit level is grade A.

Awarding Overall Subject Grades

When a candidate has completed all of the units for a qualification, the uniform marks achieved in each unit are aggregated (added up) to give a total uniform mark for the qualification. The candidate is then awarded an overall subject grade.

The subject level uniform mark (um) grade boundaries are set at the same percentage of uniform marks as the unit level boundaries. The subject level um boundaries do not change year on year. Table 4 shows the subject level uniform mark boundaries for a revised GCSE qualification with a total of 400 uniform marks.

Subject Grade	Subject level uniform mark grade boundary (for a 400um GCSE qualification)
A	320 (80% of 400)
B	292 (73% of 400)
C*	268 (67% of 400)
C	240 (60% of 400)
D	200 (50% of 400)
E	160 (40% of 400)
F	120 (30% of 400)
G	80 (20% of 400)

Table 4

Table 5 shows the uniform marks achieved by a candidate in each of the 3 units of a 400um revised GCSE qualification.

Unit	Uniform Mark Achieved
1	98
2	123
3	72

Table 5

The total uniform mark = $98 + 123 + 72 = 293\text{um}$. Table 4 shows that the B boundary at subject level is set at 292um and the A boundary is set at 320um . This candidate would therefore achieve a grade B at subject level.

Awarding the A* Grade at Subject Level

1. The A* grade is only awarded when candidates cash-in and their uniform marks for each unit are aggregated (added up). The first A* grades will be awarded in summer 2019.
2. In summer 2019 the A* grade will be awarded using a formula. The percentage of candidates who will be awarded an A* is determined as follows:

$$\text{Percentage of those candidates achieving at least grade A who will be awarded an A*} \\ = 7\% + 0.5 \times (\text{percentage of candidates awarded grade A or above})$$

3. For example, the formula determines that if 30% of **all** candidates in a subject achieve a grade A or above then 22% of those candidates should achieve an A* [$7 + 0.5 \times 30 = 22\%$]. This equates to 6.6% of **all** candidates (22% of $30\% = 6.6\%$ overall).
4. It is anticipated that A* uniform mark boundaries may vary across different GCSE subjects and examination series.

If you would like more information on the changes happening to GCSE grading in Northern Ireland, go to http://ccea.org.uk/regulation/gcse_grading

