Realising potential

## Guide to the Uniform mark scale (UMS) <br> Uniform marks in A-level and GCSE exams

This booklet explains why the Uniform mark scale (UMS) is necessary and how it works. It is intended for exams officers and others with a reasonable understanding of the exam system and its terminology.

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## 1. Introduction

For some years nearly all A-level, AS and GCSE specifications have used a uniform mark scale (UMS). Uniform marks have also been used in many of our Level 1/Level 2 Certificates (iGCSEs).

Specifications which use uniform marks will continue to do so until they are withdrawn. However, uniform marks are not used in reformed A-level, AS and GCSE exams for first teaching in and after September 2015.

Appendix A contains tables showing the relationship between uniform marks and grades for our A-level exams and the GCSE sciences. For details for all other AQA GCSE exams, please refer to the uniform marks section of the AQA website (aqa.org.uk/exams-administration/results-days/grade-boundaries-and-ums).

## 2. Why we need the UMS

In linear specifications, students take all papers in the same exam series. After scaling the raw marks to comply with paper weightings ${ }^{1}$, students' marks are added to give a total mark for the exam as a whole. Using the grade boundaries set by the awarding committee, subject grades are then allocated.

Modular specifications, on the other hand, allow students to take the module/unit exams in different series. Papers for a particular unit may vary slightly in levels of difficulty. A mark of 45 in summer 2016, for example, may represent the same level of achievement as a mark of 48 in summer 2017. Some method must therefore be found to put the marks from different series on a common, or uniform, scale so that both 45 (from 2016) and 48 (from 2017) have the same value when contributing to an overall grade.

One way of resolving this problem would be to award just grades to students for each unit. The grades could then be equated to points (for example: $A=5, B=4, C=3, D=2, E=1$ for $A$-level or $A^{*}=8, A=7, B=6$, $\mathrm{C}=5, \mathrm{D}=4, \mathrm{E}=3, \mathrm{~F}=2, \mathrm{G}=1$ for GCSE) and each student's points could be added to give him/her a points total for the subject as a whole.

This points method would have disadvantages for A-level and GCSE qualifications, as it needs to be modified when the units are not equally weighted and gives the same credit to a student with a low mark in a particular grade as to one with a high mark in that grade. The UMS was developed to avoid the disadvantages of the points method, although the principle is the same.

From 2014 all GCSEs became linear. However, because the specifications were largely unchanged, they continue to use uniform marks until they are withdrawn. A-levels remained modular, and specifications introduced before September 2015 also continue to use uniform marks until they are withdrawn.

The reformed GCSE, AS and A-level specifications, for first teaching in September 2015, September 2016 or September 2017 (depending on the subject), are linear. A UMS would have little purpose and would introduce unnecessary complexity. Therefore, the awarding bodies and Ofqual agreed that UMS would no longer be used. Please see aqa.org.uk/about-us/what-we-do/policy/gcse-and-a-levelchanges for the timelines for the introduction of reformed specifications. The details in this booklet do not apply to reformed specifications.

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## 3. How the UMS works

The relationships between uniform marks and grades are shown in the uniform marks section of the AQA website (aqa.org.uk/exams-administration/results-days/grade-boundaries-and-ums). Details are also provided in Appendix A for A-level and for the GCSE sciences.

For further details of how the UMS varies between different qualifications see Section 4 of this booklet.
Table 1 refers to an AS unit marked out of 80 and with a $30 \%$ weighting in a four-unit A-level. The second column shows typical raw mark grade boundaries. These boundaries are determined by an awarding committee following each exam series. For example, the grade A boundary (ie the lowest mark for grade A) is 61 (approximately $76 \%$ ).

The third column (which is extracted from Table A2 in Appendix A) shows the uniform mark boundaries. For a unit with $30 \%$ weighting in a four-unit A-level, the maximum uniform mark is 120 and uniform marks in the range 96-120 correspond to grade A. This does not mean that the paper is marked out of 120 or that a student has to score $80 \%$ of the raw marks $(96 / 120)$ to obtain grade A on the unit.

For example:

- a student who scores 61 (the lowest raw mark for grade A) will receive a uniform mark of 96 (the lowest uniform mark for grade A)
- a student who scores 43 will receive a uniform mark of 60
- a student who scores 49 will receive a uniform mark of 72
- a student who scores 46 (exactly half way between 43 and 49) will receive to a uniform mark of 66 (exactly half way between 60 and 72 ) - see Figure 1.

Exactly the same principles apply for other qualifications that use uniform marks.
When a student has completed all units, his/her uniform marks are added together. The overall subject grade is then determined using the appropriate table in Appendix A. For example, using Table A2 in Appendix A for a four-unit A-level, a student with a total uniform mark of 209 obtains grade D, while a student with a total uniform mark of 199 obtains grade E .

Table 1 AS unit with maximum raw mark $\mathbf{8 0}$ and accounting for $\mathbf{3 0 \%}$ of the assessment in a four-unit A-level: typical raw mark grade boundaries, together with the uniform mark boundaries ${ }^{2}$

| Grade | Lowest raw mark in grade <br> $(\max \mathbf{8 0})$ | Corresponding uniform mark <br> $(\mathbf{m a x ~ 1 2 0 )}$ |
| :--- | :--- | :--- |
| A | 61 | 96 |
| B | 55 | 84 |
| C | 49 | 72 |
| D | 43 | 60 |
| E | 37 | 48 |
| $(N)$ | 31 | 36 |

Figure 1 Conversion to uniform marks (for part of the mark range) for the data in Table 1


## 4. Uniform mark scales for different qualifications

### 4.1. A-level and AS

In all awarding bodies, the uniform mark grade boundaries in A-level are always at the following percentages of the maximum uniform mark for the unit or qualification:

A 80\%, B 70\%, C 60\%, D 50\%, E 40\%.
The maximum uniform marks are:

- 600 for a six unit Advanced qualification
- 400 for a four unit Advanced qualification
- 200 for a two unit Advanced qualification.

So the uniform mark grade boundaries for a four-unit qualification are:
A 320 (=80\% of 400), B 280 (=70\% of 400), C 240, D 200, E 160.
In A-level, grade $\mathrm{A}^{*}$ is awarded to students achieving grade A overall and 90 per cent or more of the maximum uniform mark on the aggregate of the A2 units. For example, in a four unit qualification, grade $A^{*}$ is awarded to students achieving at least 320 uniform marks on the A-level overall and at least 180 uniform marks on the sum of the two A2 units. Mathematics and Further Mathematics follow a different rule - please see Table A1 in Appendix A.

For a unit which accounts for $30 \%$ of the total assessment in a four-unit A-level, the maximum uniform mark is $120(=30 \%$ of 400$)$. The uniform mark grade boundaries for such a unit are:

A 96 ( $=80 \%$ of 120 ), B 84 ( $=70 \%$ of 120), C 72, D 60, E 48.
(see Table A2 in Appendix A and Table 1 in Section 3).
In Applied A-level, the units are equally-weighted and all have a maximum uniform mark of 100 , with grade boundaries:

A 80, B 70, C 60, D 50, E 40.
In Applied A-level, grade $A^{*}$ is available in the single award and grades $A^{*} A^{*}$ and $A^{*} A$ are available in the double award. See Table A5 in Appendix A for details.

### 4.2. GCSE

In all awarding bodies, the uniform mark grade boundaries in GCSEs are at the following percentages of the maximum uniform mark for the unit/module or qualification:
A* 90\%, A 80\%, B 70\%, C 60\%, D 50\%, E 40\%, F 30\%, G 20\%.

As the maximum uniform marks, numbers of units and unit weightings vary, we can't include details for GCSE specifications in Appendix A, but the sciences are shown by way of example. Please refer to the uniform marks page on the AQA website (aqa.org.uk/exams-administration/results-days/grade-boundaries-and-ums), where you will find the relationship between uniform marks and grades for all our qualifications and units which use uniform marks.

## 5. Notional $N$, the $A^{*}$ conversion point and the 'cap'

The tables in Appendix $A$ refer to a notional grade $N$. This is used as a conversion point when calculating uniform marks from raw marks. There is also a conversion point above the highest available grade called the 'cap' and in A2 units there is an $\mathrm{A}^{*}$ conversion point.

Notional N and the cap (and, in A2 units, notional $\mathrm{A}^{*}$ ) are used to ensure that, on conversion to uniform marks, raw marks have the same value just above and just below the boundary for both the highest available grade and the lowest available grade ${ }^{3}$. When using the cap, a student with a raw mark below the maximum may sometimes obtain the maximum uniform mark.

Figure 2 shows the conversion to uniform marks for the AS data in Table 1. It extends Figure 1 to cover the whole mark range. The plotted points correspond to grade boundaries (including the maximum mark, the cap, notional N and zero). You can see that:

- the slope of the graph is the same on both sides of grade A, indicating that raw marks have the same value just above and just below this boundary
- similarly, the slope is the same on both sides of grade E
- students with a raw mark above the cap obtain the maximum uniform mark (120).

Figure 2 Conversion to uniform marks for the data in Table 1

${ }^{3}$ Notional N is not used below Grade G in GCSE specifications.

### 5.1. Calculating the cap in an AS unit

The mark width from the A to B raw mark boundaries is doubled and added to the A boundary. For example, in Table 1 the cap is:
$2 \times 6+61=73$ raw marks.
This raw mark is converted to the maximum uniform mark for the unit (120 in this case). Thus, in Table 1, students with $80,79,78,77,76,75,74$ or 73 raw marks will all receive 120 uniform marks.

### 5.2. Calculating notional $A^{*}$ and the cap in an $A 2$ unit

(i) Where the mark width from the A raw mark boundary to the maximum is more than twice that from $A$ to $B$, the $A^{*}$ conversion point is normally the same amount above $A$ as $B$ is below $A$.
(ii) Where the mark width from the A raw mark boundary to the maximum is less than or equal to twice that from $A$ to $B$, the $A^{*}$ conversion point is normally halfway between $A$ and the maximum raw mark. This is rounded down, where necessary, to the nearest whole number below (eg $781 / 2$ is rounded to 78).
(iii) The (raw mark) $\mathrm{A}^{*}$ conversion point may be adjusted following a review of statistical and technical evidence.
(iv) The cap is the same number of raw marks above $A^{*}$ as $A$ is below $A^{*}$. This is converted to the maximum uniform mark for the unit. The $A^{*}$ conversion point is converted to $90 \%$ of the maximum uniform mark.

Examples are shown in Tables 2 (i) and (ii) and Figure 3 (i) and (ii). The raw mark boundaries are set by the awarding committee, with $\mathrm{A}^{*}$ calculated as explained above. The uniform mark boundaries are fixed at $\mathrm{A}: 80 \%$ of the maximum, B: $70 \%$, etc. Note that in (ii) the $\mathrm{A}^{*}$ conversion point is calculated to be $561 / 2$, and this is rounded down to 56 , according to the rules described above.

Table 2 A2 unit with maximum raw mark 60 and maximum uniform mark 80: two sets of typical $A$ and $B$ raw mark grade boundaries together with the uniform mark boundaries, the $A^{*}$ conversion point and the cap

| (i) | Lowest raw mark <br> in grade | Corresponding <br> uniform mark |
| :--- | :--- | :--- |
| Maximum | 60 | 80 |
| (cap) | 57 | 80 |
| (A*) | 52 | 72 |
| A | 47 | 64 |
| B | 42 | 56 |
| (ii) |  |  |
| Maximum | 60 | Lowest raw mark <br> in grade |
| (cap) | Corresponding <br> uniform mark |  |
| (A*) | 59 | 80 |
| A | 56 | 80 |
| B | 53 | 72 |

Figure 3(i) (illustrating Table 2(i))


Figure 3(ii) (illustrating Table 2(ii))


### 5.3. Calculating notional N in an AS or A 2 unit

The mark width from the $D$ to $E$ raw mark boundaries is subtracted from the $E$ boundary. For example, in Table 1 notional N is

37-6 = 31 raw marks.
This raw mark is converted to the appropriate uniform mark (36 in Table 1).

### 5.4. Calculating $A^{*}$ and the cap in an untiered or Higher tier GCSE unit

The A* boundary in GCSE units is calculated as follows (the same procedure as that used for A2 units in A-level):
(i) Where the mark width from the A raw mark boundary to the maximum is more than twice that from $A$ to $B$, the $A^{*}$ boundary is the same amount above $A$ as $B$ is below $A$.
(ii) Where the mark width from the $A$ raw mark boundary to the maximum is less than or equal to twice the mark width from $A$ to $B$, the $A^{*}$ boundary is halfway between $A$ and the maximum. This is rounded down, where necessary, to the nearest whole number below (eg $781 / 2$ is rounded to 78 ).
(iii) The (raw mark) A* boundary may be adjusted following a review of statistical and technical evidence.
(iv) The cap is the same number of raw marks above $A^{*}$ as $A$ is below $A^{*}$. This is converted to the maximum uniform mark for the unit. The A* boundary is converted to $90 \%$ of the maximum uniform mark.

### 5.5. Calculating the cap in a Foundation tier GCSE unit

The cap is the same number of raw marks above C as D is below C . This is converted to the maximum uniform mark for the Foundation tier of the unit (equivalent to the top of grade C).

### 5.6. Calculating grade D in a Higher tier GCSE unit

To ensure that raw marks have the same value just above and just below the grade C boundary, the Higher tier GCSE grade D raw mark boundary is calculated arithmetically, as follows.

- Where the mark width from the C raw mark boundary to zero is greater than or equal to twice that from $B$ to $C$, the $D$ boundary is normally the same amount below $C$ as $B$ is above $C$.
- Where the mark width from the $C$ raw mark boundary to zero is less than twice that from $B$ to $C$, the D boundary is normally halfway between the C boundary and zero ${ }^{4}$.


### 5.7. Calculating notional N (allowed E ) in a Higher tier GCSE unit

Half of the number of raw marks between C and D is subtracted from D . This raw mark is notional N (allowed E ). It is converted to the uniform mark halfway between D and $\mathrm{E}^{5}$.

### 5.8 Example (Higher tier GCSE)

Tables 3(i) and (ii) show two sets of boundaries for a Higher tier GCSE unit with maximum raw mark 60 and maximum uniform mark 90.

The $A$ and $C$ boundaries are set by the awarding committee and $B$ is placed halfway between $A$ and C. In Table 3(i) A* is calculated using the procedure in Section 5.4(i) as the mark width from A to the maximum is more than twice the mark width from A to B. In Table 3(ii) $\mathrm{A}^{*}$ is calculated using the procedure in Section 5.4(ii) as the mark width from A to the maximum is less than twice the mark width from A to B. In both tables D is calculated as a raw mark of 28 and notional $N$ (allowed $E$ ) is calculated as a raw mark of 25 .

Uniform mark boundaries are fixed at A*: 90\% of the maximum, A: $80 \%, \mathrm{~B}: 70 \%$ etc. Notional N is a uniform mark of $401 / 2$, which is rounded up to 41 .

Uniform marks between the grade boundaries are calculated in the usual way (see Section 3). For example:

- a student who scores 36 (exactly one third of the amount from 34 to 40 ) will receive a uniform mark of 57 (one third of the amount from 54 to 63)
- a student who scores 20 (four fifths of the amount from 0 to 25 ) will receive a uniform mark of 33 (four fifths of the amount from 0 to 41 rounded to the nearest whole number)
- in Table 3(i) students who score 60,59 or 58 will all receive a uniform mark of 90.

Table 3 GCSE Higher tier unit with maximum raw mark 60 and maximum uniform mark 90: two sets of typical raw mark grade boundaries with uniform mark boundaries, $\mathbf{N}$ (or allowed E) and the cap

| (i) | Lowest raw mark in grade | Corresponding uniform mark | (ii) | Lowest raw mark in grade | Corresponding uniform mark |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum | 60 | 90 | Maximum | 60 | 90 |
| (cap) | 58 | 90 | (cap) | 59 | 90 |
| ( ${ }^{*}$ ) | 52 | 81 | ( ${ }^{*}$ ) | 53 | 81 |
| A | 46 | 72 | A | 47 | 72 |
| B | 40 | 63 | B | 40 | 63 |
| C | 34 | 54 | C | 34 | 54 |
| D | 28 | 45 | D | 28 | 45 |
| (N) | 25 | 41 | (N) | 25 | 41 |

### 5.9. Example (Foundation tier GCSE)

Table 4 shows boundaries for a Foundation Tier GCSE unit with maximum raw mark 60 and maximum uniform mark for the unit overall 90 (the same as in Table 3).

As in Table 3, the raw mark boundaries are set by the awarding committee. The maximum uniform mark for the Foundation tier corresponds to a top grade C. Referring to the uniform mark column of Table 3, a top grade $C$ is 62 uniform marks.

The cap calculation method is explained in Section 5.5.
Uniform marks between the grade boundaries are calculated in the usual way (see Section 3). For example:

- a student who scores 44 (exactly halfway from 40 to 48 ) will receive a uniform mark of 50 (= 49.5 rounded up)
- students who score $60,59,58,57$ or 56 will all receive a uniform mark of 62.

Table 4 GCSE Foundation tier unit with maximum raw mark 60 and maximum uniform mark 62 (see text): typical raw mark grade boundaries with uniform mark boundaries and the cap

|  | Lowest raw mark <br> in grade | Corresponding <br> uniform mark |
| :--- | :--- | :--- |
| Maximum | 60 | 62 |
| (cap) | 56 | 62 |
| C | 48 | 54 |
| D | 40 | 45 |
| E | 33 | 36 |
| F | 26 | 27 |
| G | 19 | 18 |

## 6. Raw and scaled marks

In the results documentation, students' scaled marks (sometimes abbreviated to 'sca') are listed for each unit or component. For most specifications, scaled marks are the same as raw marks. They may be different in the small number of specifications where a unit is divided into two (or more) components.

For example, if Component 1 is marked out of 30 , Component 2 is marked out of 60 and each is intended to account for $50 \%$ of the assessment of a unit, students' marks for Component 1 must be multiplied by two before being added to the marks for Component 2. Thus, a Component 1 raw mark of 24 out of 30 becomes a scaled mark of 48 out of 60 . For Component 2 , no scaling is needed, so scaled marks are the same as raw marks. Students' total marks for the unit are subsequently converted to uniform marks.

In specifications which use uniform marks, scaling as described above may be needed in the few cases where a unit is divided into two components.

## Appendix A

## Relationship between uniform marks and grades

Details are given for A-levels and for the GCSE sciences. For other GCSEs please consult the uniform marks page of the AQA website (aqa.org.uk/exams-administration/results-days/grade-boundaries-and-ums).

Table A1 Six unit A-level

|  | Grade boundaries in terms of uniform marks <br> according to weighting of unit |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Weighting as <br> \% of total AS <br> assessment | $\mathbf{2 0 \%}$ | $\mathbf{3 0 \%}$ | $\mathbf{3 3 . 3} \%$ | $\mathbf{3 5 \%}$ | $\mathbf{4 0 \%}$ | $\mathbf{4 6 . 7 \%}$ | $\mathbf{1 0 0 \%}$ | AS <br> subject <br> award | Advanced <br> subject <br> award |
| Weighting as <br> \% of total <br> Advanced <br> assessment | $\mathbf{1 0 \%}$ | $\mathbf{1 5 \%}$ | $\mathbf{1 6 . 7 \%}$ | $\mathbf{1 7 . 5 \%}$ | $\mathbf{2 0 \%}$ | $\mathbf{2 3 . 3 \%}$ | $\mathbf{5 0 \%}$ |  |  |
| Max uniform mark | 60 | 90 | 100 | 105 | 120 | 140 | 300 | 300 | 600 |
| A | 48 | 72 | 80 | 84 | 96 | 112 | 240 | 240 | 480 |
| B | 42 | 63 | 70 | 74 | 84 | 98 | 210 | 210 | 420 |
| C | 36 | 54 | 60 | 63 | 72 | 84 | 180 | 180 | 360 |
| D | 30 | 45 | 50 | 53 | 60 | 70 | 150 | 150 | 300 |
| E | 24 | 36 | 40 | 42 | 48 | 56 | 120 | 120 | 240 |
| (N) | 18 | 27 | 30 | 32 | 36 | 42 | 90 | - | - |

In the A-level subject qualification, grade $A^{*}$ is awarded to students achieving grade $A$ overall (ie at least 480 uniform marks) and $90 \%$ or more of the maximum uniform mark (ie at least 270 uniform marks) on the aggregate of the three A2 units.

In A-level Mathematics, grade $\mathrm{A}^{*}$ is awarded to students achieving grade A overall (ie at least 480 uniform marks) and 90 per cent or more of the maximum uniform mark (ie at least 180 uniform marks) on the aggregate of units MPC3 and MPC4.

In A-level Further Mathematics, grade $\mathrm{A}^{*}$ is awarded to students achieving grade A overall (ie at least 480 uniform marks) and 90 per cent or more of the maximum uniform mark (ie at least 270 uniform marks) on the aggregate of their three best A2 units.

Table A2 Four unit A-level

|  | Grade boundaries in terms of uniform marks <br> according to weighting of unit |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Weighting as <br> \% of total AS <br> assessment | $\mathbf{3 0 \%}$ | $\mathbf{4 0 \%}$ | $\mathbf{5 0 \%}$ | $\mathbf{6 0 \%}$ | $\mathbf{7 0 \%}$ |  |  |
| Weighting as <br> \% of total <br> Advanced <br> assessment | $\mathbf{1 5 \%}$ | $\mathbf{2 0 \%}$ | $\mathbf{2 5 \%}$ | $\mathbf{3 0 \%}$ | $\mathbf{3 5 \%}$ | AS <br> subject <br> award |  |
| Max uniform mark | 60 | 80 | 100 | 120 | 140 | Advanced <br> subject <br> award |  |
| A | 48 | 64 | 80 | 96 | 112 | 160 |  |
| B | 42 | 56 | 70 | 84 | 98 | 140 |  |
| C | 36 | 48 | 60 | 72 | 84 | 120 |  |
| D | 30 | 40 | 50 | 60 | 70 | 100 |  |
| E | 24 | 32 | 40 | 48 | 56 | 80 |  |
| (N) | 18 | 24 | 30 | 36 | 42 | - |  |

In the A-level subject qualification, grade $\mathrm{A}^{*}$ is awarded to students achieving grade A overall (ie at least 320 uniform marks) and $90 \%$ or more of the maximum uniform mark (ie at least 180 uniform marks) on the aggregate of the two A2 units.

Table A3 Two unit A-level
Grade boundaries in terms of uniform
marks according to weighting of unit
\(\left.$$
\begin{array}{l|l|l|l}\hline \begin{array}{l}\text { Weighting as \% of total } \\
\text { AS assessment }\end{array} & \mathbf{1 0 0 \%} & & \text { AS subject } \\
\text { award }\end{array}
$$ \begin{array}{l}Advanced <br>
subject <br>

award\end{array}\right]\)| Weighting as \% of total <br> Advanced assessment | $\mathbf{5 0 \%}$ | 100 | 200 |
| :--- | :--- | :--- | :--- |
| Max uniform mark | 100 | 80 | 160 |
| A | 80 | 70 | 140 |
| B | 70 | 60 | 120 |
| C | 60 | 50 | 100 |
| D | 50 | 40 | 80 |
| E | 40 | - | - |
| (N) | 30 |  |  |

In the A-level subject qualification, grade $A^{*}$ is awarded to students achieving grade $A$ overall (ie at least 160 uniform marks) and $90 \%$ or more of the maximum uniform mark (ie at least 90 uniform marks) on the A2 unit.

Table A4 Applied A-level (continues on next page)
Each unit accounts for:

- $33.3 \%$ of the assessment for AS single award
- $16.7 \%$ of the assessment for AS double award
- $16.7 \%$ of the assessment for Advanced single award
- $8.3 \%$ of the assessment for Advanced double award.

|  | Grade boundaries for <br> each unit in terms of <br> uniform marks |
| :--- | :--- |
| Max uniform mark | 100 |
| A | 80 |
| B | 70 |
| C | 60 |
| D | 50 |
| E | 40 |
| (N) | 30 |


|  | Grade boundaries for <br> single award in terms of <br> uniform marks |  |
| :--- | :--- | :--- |
|  | AS | Advanced |
| Max uniform mark | 300 | 600 |
| A | 240 | 480 |
| B | 210 | 420 |
| C | 180 | 360 |
| D | 150 | 300 |
| E | 120 | 240 |

In the A-level subject qualification, grade $\mathrm{A}^{*}$ is awarded to students achieving grade A overall (ie at least 480 uniform marks) and $90 \%$ or more of the maximum uniform mark (ie at least 270 uniform marks) on the aggregate of the three A2 units.

Table A4 Applied A-level (continued)

|  | Grade boundaries for <br> nine unit award <br> (Advanced with Advanced <br> Subsidiary (additional)) in <br> terms of uniform marks |
| :--- | :--- |
| Max uniform mark | 900 |
| AA | 720 |
| AB | 675 |
| BB | 630 |
| BC | 585 |
| CC | 540 |
| CD | 495 |
| DD | 450 |
| DE | 405 |
| EE | 360 |

Grade $\mathrm{A}^{*} \mathrm{~A}$ is awarded to students achieving grade AA overall (ie at least 720 uniform marks) and $90 \%$ or more of the maximum uniform mark (ie at least 270 uniform marks) on the aggregate of the three A2 units. Grade $A^{*} A^{*}$ is not available for this qualification.

Grade boundaries for double award in terms of uniform marks

|  | AS | Advanced |
| :--- | :--- | :--- |
| Max uniform mark | 600 | 1200 |
| AA | 480 | 960 |
| AB | 450 | 900 |
| BB | 420 | 840 |
| BC | 390 | 780 |
| CC | 360 | 720 |
| CD | 330 | 660 |
| DD | 300 | 600 |
| DE | 270 | 540 |
| EE | 240 | 480 |

In the Advanced subject qualification, grade $\mathrm{A}^{*} \mathrm{~A}^{*}$ and grade $A^{*} A$ are available. To be eligible for these grades, students need to achieve grade AA overall (ie at least 960 uniform marks). Grade $A^{*} A^{*}$ is awarded to those achieving $90 \%$ of the maximum uniform mark (ie at least 540 uniform marks) on the aggregate of the six A2 units. Grade $A^{*} A$ is awarded to those achieving $90 \%$ or more of the maximum uniform mark (ie at least 270 uniform marks) on the aggregate of their three best A2 units.

Table A5 GCSE Science A Route 1 (4405)
Grade boundaries in terms of uniform marks

|  | Each written unit <br> (Foundation tier) | Each written unit <br> (Higher tier) | Controlled <br> assessment | GCSE <br> award |
| :--- | :--- | :--- | :--- | :--- |
| Weighting | $25 \%$ | $25 \%$ | $25 \%$ | $100 \%$ |
| Max uniform mark | 69 | 100 | 100 | 400 |
| A $^{*}$ | - | 90 | 90 | 360 |
| A | - | 80 | 80 | 320 |
| B | - | 70 | 70 | 280 |
| C | 60 | 60 | 60 | 240 |
| D | 50 | 50 | 50 | 200 |
| (N) | - | 45 | - | - |
| E | 40 | - | 40 | 160 |
| F | 30 | - | 30 | 120 |
| G | 20 | - | 20 | 80 |

Table A6 GCSE Science A Route 2 (4406)

|  | Grade boundaries in terms of uniform marks <br>  <br> SCA1FP <br> (Foundation <br> tier) |  |  |  |  |  |  | SCA1HP <br> (Higher tier) | SCA2FP <br> (Foundation <br> tier) | SCA2HP <br> (Higher tier) | Controlled <br> assessment | GCSE <br> award |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Weighting | $35 \%$ | $35 \%$ | $40 \%$ | $40 \%$ | $25 \%$ | $100 \%$ |  |  |  |  |  |  |
| Max uniform mark | 97 | 140 | 111 | 160 | 100 | 400 |  |  |  |  |  |  |
| A $^{*}$ | - | 126 | - | 144 | 90 | 360 |  |  |  |  |  |  |
| A | - | 112 | - | 128 | 80 | 320 |  |  |  |  |  |  |
| B | - | 98 | - | 112 | 70 | 280 |  |  |  |  |  |  |
| C | 84 | 84 | 96 | 96 | 60 | 240 |  |  |  |  |  |  |
| D | 70 | 70 | 80 | 80 | 50 | 200 |  |  |  |  |  |  |
| (N) | - | 63 | - | 72 | - | - |  |  |  |  |  |  |
| E | 56 | - | 64 | - | 40 | 160 |  |  |  |  |  |  |
| F | 42 | - | 48 | - | 30 | 120 |  |  |  |  |  |  |
| G | 28 | - | 32 | - | 20 | 80 |  |  |  |  |  |  |

Table A7 GCSE Additional Science Route 1 (4408)
Grade boundaries in terms of uniform marks

|  | Each written unit <br> (Foundation tier) | Each written unit <br> (Higher tier) | Controlled <br> assessment | GCSE <br> award |
| :--- | :--- | :--- | :--- | :--- |
| Weighting | $25 \%$ | $25 \%$ | $25 \%$ | $100 \%$ |
| Max uniform mark | 69 | 100 | 100 | 400 |
| A $^{*}$ | - | 90 | 90 | 360 |
| A | - | 80 | 80 | 320 |
| B | - | 70 | 70 | 280 |
| C | 60 | 60 | 60 | 240 |
| D | 50 | 50 | 50 | 200 |
| (N) | - | 45 | - | - |
| E | 40 | - | 40 | 160 |
| F | 30 | - | 30 | 120 |
| G | 20 | - | 20 | 80 |

Table A8 GCSE Additional Science A Route 2 (4409)

|  | Grade boundaries in terms of uniform marks <br> AS1FP <br> (Foundation <br> tier) |  |  |  |  |  |  | AS1HP <br> (Higher tier) | AS2FP <br> (Foundation <br> tier) | AS2HP <br> (Higher tier) | Controlled <br> assessment | GCSE <br> award |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Weighting | $35 \%$ | $35 \%$ | $40 \%$ | $40 \%$ | $25 \%$ | $100 \%$ |  |  |  |  |  |  |
| Max uniform mark | 97 | 140 | 111 | 160 | 100 | 400 |  |  |  |  |  |  |
| A | - | 126 | - | 144 | 90 | 360 |  |  |  |  |  |  |
| A | - | 112 | - | 128 | 80 | 320 |  |  |  |  |  |  |
| B | - | 98 | - | 112 | 70 | 280 |  |  |  |  |  |  |
| C | 84 | 84 | 96 | 96 | 60 | 240 |  |  |  |  |  |  |
| D | 70 | 70 | 80 | 80 | 50 | 200 |  |  |  |  |  |  |
| (N) | - | 63 | - | 72 | - | - |  |  |  |  |  |  |
| E | 56 | - | 64 | - | 40 | 160 |  |  |  |  |  |  |
| F | 42 | - | 48 | - | 30 | 120 |  |  |  |  |  |  |
| G | 28 | - | 32 | - | 20 | 80 |  |  |  |  |  |  |

Table A9 Each separate science: Biology (4401), Chemistry (4402), Physics (4403)
Grade boundaries in terms of uniform marks

|  | Each written unit <br> (Foundation tier) | Each written unit <br> (Higher tier) | Controlled <br> assessment | GCSE <br> award |
| :--- | :--- | :--- | :--- | :--- |
| Weighting | $25 \%$ | $25 \%$ | $25 \%$ | $100 \%$ |
| Max uniform mark | 69 | 100 | 100 | 400 |
| A | - | 90 | 90 | 360 |
| A | - | 80 | 80 | 320 |
| B | - | 70 | 70 | 280 |
| C | 60 | 60 | 60 | 240 |
| D | 50 | 50 | 50 | 200 |
| (N) | - | 45 | - | - |
| E | 40 | - | 40 | 160 |
| F | 30 | - | 30 | 120 |
| G | 20 | - | 20 | 80 |

Realising potential


[^0]:    ${ }^{1}$ The term 'raw mark' denotes the original mark given when a paper is assessed. The 'weighting' of a paper is its contribution to the total assessment: for example to say that the weighting is $40 \%$ means that the paper accounts for $40 \%$ of the total assessment. Raw marks often have to be multiplied by some scaling factor (eg 1.5) in order to give them the correct weighting. The new marks are called 'scaled marks'. See Section 6.

