

[News story: Guide to GCSE results for England, 2017](#)

Key points

1. Overall GCSE outcomes are stable.
2. Overall results for 16-year-olds in English language, English literature and mathematics are stable at grade C/4 when comparing combined GCSE and international GCSE outcomes last summer, with GCSE outcomes this summer.
3. For the reformed GCSE qualifications in English language and mathematics, outcomes for 16-year-olds in England are broadly similar to [the modelling that we published in our blog](#).

Today (24 August 2017) we are publishing:

Background to GCSE reforms

The first of the reformed GCSEs in English language, English literature and mathematics, are being issued today. The qualifications were designed in line with the Government's policy for the qualifications and therefore:

- have more demanding subject content than the qualifications they replace
- are accessible, with good teaching, to the same proportion of students that currently sit GCSE examinations at the end of key stage 4
- all the assessments are taken at the end of the course and, for these 3 subjects, all assessment is by examination
- use tiered examination papers only where it is necessary: so English language and English literature GCSEs are not tiered and GCSE mathematics is tiered

The government also asked us to consider the case for a new grading scale. Students' performance is being recognised using the new grades of 9 to 1.

These changes reflect the government's intention that the qualifications better prepare students for further study and work, are more stretching for the most able students and remain accessible to the range of students who have traditionally taken GCSEs.

The new GCSEs are being phased in. By 2020 all GCSEs taken in England will be in line with this policy and be graded 9 to 1. (The policy steer was set out in [a letter from the Secretary of State to Ofqual](#) in February 2013).

Setting standards in GCSEs in 2017

We have set out our approach to setting standards in GCSEs this summer in [our monitoring report](#). In the 2017 awards, exam boards used predictions based on students' prior attainment at key stage 2 to inform the setting of grade boundaries.

And, as in previous years, senior examiners have been involved in all awards. In the reformed GCSEs they were asked to check whether the student work at the grade boundaries suggested by the statistics was at an acceptable standard for the grade (either 7, 4 or 1). We have not intervened to ask any boards to change their grade boundaries this summer.

For the reformed GCSEs we [published a blog](#) that estimated the likely proportions of 16-year-old students that would achieve each grade in GCSE English language and mathematics, including grade 9, in England (a [technical explanation of the modelling](#) is also available). As with any modelling, our figures were based on a number of assumptions, so these were only estimates. However, our modelling is broadly similar to the proportion of 16-year-old students in England achieving each grade this summer. We said in our blog that we could be more confident in the estimates at grades 7, 4 and 1, since the bottom of these grades were set to align with the bottom of grades A, C and G in the previous A* to G grade structure. The modelling shows that the estimates are very close to the actual outcomes at these grades.



Grade 9 in reformed GCSE subjects

This summer is the first award of the new grade 9 in the reformed GCSE English language, English literature and mathematics specifications. Grade 9 is not the same as A: *it is a new grade, designed to recognise the very highest performing students, so there are fewer grade 9s than there were As.*

Last year we announced the detail of how grade 9 will work, known as [the 'tailored approach'](#). This approach will mean that across all subjects (when all GCSEs are graded 9 to 1) about 20% of those students achieving grade 7 or above will achieve a grade 9. We adopted this approach in order to be fair across all subjects, including those where there are relatively high proportions of students currently achieving A* and A. We have provided [more details of the approach to setting grade 9](#) on our blog.

In the first year each specification is awarded, grade 9 is calculated arithmetically, using the formula shown below for 16 year old students that are matched to their prior attainment at key stage 2. These are the students that are included in the statistical predictions that are used to guide awarding. This means that the percentage of all students achieving a grade 9, relative to the percentage achieving a grade 7, will not necessarily correspond to the formula.

Percentage of those achieving at least a grade 7 who will be awarded a grade 9 = $7\% + 0.5 \times (\text{percentage of students awarded grade 7 and above})$

Grade boundaries

It is always difficult to compare in a meaningful way grade boundaries between old and new qualifications. Maximum marks for the papers, the number

of papers in a subject and the type of assessment can all be different. Where some of the old qualifications had coursework, grade boundaries on written papers may have been higher to compensate for high marks on the coursework.

Comparing the previous GCSE qualifications with the reformed qualifications is particularly challenging for a number of reasons.

The reformed GCSE English language and English literature qualifications are no longer tiered. The new papers are very different from the legacy papers since they are targeted at the full range of ability.

In mathematics, the mark allocations and the grades covered by the tiered papers have changed. When producing their question papers, exam boards are required to take all reasonable steps to ensure that the targeting of marks to grades complies with our [subject level conditions](#). However, it is not possible to accurately predict the difficulty of a question before it has been sat by students. This means that a question targeted at a particular grade might perform at a lower or higher grade than intended, which will influence the position of the grade boundaries. [Our sawtooth research](#) also suggests that, on average, grade boundaries will increase over the first few years of a specification.

The targeting of marks to grades for the foundation and higher tier in reformed GCSE mathematics are shown in the figure below (the numbers on the bars refer to the targeting of marks to grades, not to the grade that a student might achieve). The figure also shows the average grade boundary at each grade for the reformed GCSE mathematics qualifications. The average grade boundaries are weighted by the number of entries to each qualification.



GCSE English language

More 16-year-olds took GCSEs in English language this summer following changes to school performance tables. To provide a meaningful comparison of results for 16-year-olds, we have therefore combined GCSE and international GCSE data from summer 2016 to compare with GCSE data this year.

The following table shows the cumulative percentage outcomes for 16-year-olds in England in summer 2016 and summer 2017, comparing grades C/4, and grades A/7 (all of the GCSE and international GCSE combined figures in this guide are based on data provided to Ofqual by exam boards a week before results day. While the data is not complete, any missing data is likely to be missing at random). This shows that overall results for 16-year-old students in English language have remained stable in summer 2017 when compared to summer 2016, particularly at grade C/4.

Cumulative percentage at grade 2016 2017

A or 7	16.2	16.8
C or 4	69.7	69.9

GCSE English language spoken language endorsement

Performance in spoken language is reported separately and in the reformed GCSE qualifications is graded as pass, merit, or distinction. Students not achieving a grade are not classified. For the spoken language endorsement students do a prepared spoken presentation on a specific topic.

The table below shows the percentage of students achieving each endorsement grade, broken down by the grade for their performance in their examinations (these figures are based on data provided to Ofqual by exam boards a week before results day. While the data is not complete, any missing data is likely to be missing at random). It is not surprising that students achieving higher grades for their examination performance tend to perform better in the spoken language assessment too.

	Grade	Distinction	Merit	Pass	Not classified	Total
9	76.2	20.8	2.5	0.4		13,988
8	63	31.5	5.1	0.4		28,083
7	49.6	40.5	9.4	0.6		49,267
6	34.6	47.4	17.2	0.8		92,418
5	20.9	48.1	29.4	1.6		116,375
4	11.5	42.2	43.2	3.1		106,417
3	5.6	29.9	58.5	6.1		136,224
2	2.4	16.8	69.3	11.6		55,943
1	1.4	10.6	67.2	20.8		21,010
U	1.2	7.6	58.1	33.1		6,623
Total	20.9	36.6	38.1	4.4		626,348

GCSE English literature

The 16-year-old cohort has increased this summer compared to last summer. More students are taking GCSE qualifications in English literature instead of international GCSEs, following changes to school performance tables. The reformed English literature GCSE is also now the main route to gain a qualification containing literature (previously students could take GCSE English which incorporated both language and literature). This, coupled with the way in which Progress 8 performance measures are now calculated, has contributed to the increased uptake of English literature. These changes to the cohort will have had an impact on the overall outcomes.

To provide a comparison of results for 16-year-olds we have combined GCSE and international GCSE data from summer 2016 to compare with GCSE data this year. The following table shows the cumulative percentage outcomes for 16-year-olds in England in summer 2016 and summer 2017, comparing grades C/4, and grades A/7. This shows that overall results for 16-year-old students in English literature have remained stable at grade C/4. The lower outcomes at grade A/7 this year are likely to be as a result of the cohort changes this summer.

Cumulative percentage at grade 2016 2017

A or 7	21.7	19.1
C or 4	72.5	72.5

The increased uptake in English literature is as a result of new schools and colleges entering students to GCSE English literature, and existing schools and colleges, on average, entering more students this summer compared to last summer. This is shown in the table below.

Year Mean number of entries per centre Number of centres

2016	120.0	3065
2017	131.2	3965

GCSE mathematics

Like the legacy qualifications, the reformed GCSE mathematics qualifications use a two-tier assessment model. However, there are differences in the content and demand of both the higher and foundation tiers. The balance of entries between tiers has therefore changed. This is shown in the table below, that shows the percentage of 16-year-old students in England sitting the foundation and higher of the reformed qualifications this summer, compared to the linear qualifications in summer 2016.

Tier	2016	2017
Foundation	24%	47%
Higher	76%	53%

Following changes to performance tables there has also been a small increase in the number of 16-year-olds taking GCSEs in mathematics rather than international GCSEs. To provide a comparison of results for 16-year-olds we have combined GCSE and international GCSE data from summer 2016 to compare with GCSE data this year. The following table shows the cumulative percentage outcomes for 16-year-olds in England in summer 2016 and summer 2017, comparing grades C/4, and grades A/7. This shows that overall results for 16-year-old students in mathematics have remained stable at grades A/7 and C/4.

Cumulative percentage at grade 2016 2017

A or 7	19.7	19.9
C or 4	69.9	70.7

Post-16 outcomes in English language and mathematics

There has been an increase in post-16 entries for GCSE English language and mathematics qualifications this summer (from 116,821 to 135,881 in English language, and from 160,783 to 167,541 in mathematics). The table below shows the cumulative percentage outcomes for 17-year-olds, 18-year-olds, and students aged 19+ for English language and mathematics. These figures combine the outcomes for post-16 students taking the legacy and reformed

qualifications this year, and compare these to outcomes for post-16 students taking the legacy qualifications in summer 2016.

Subject	Age	A/7 2016	A/7 2017	C/4 2016	C/4 2017
English	17-year-olds	0.8	1.1	21.9	29.1
English	18-year-olds	0.2	0.3	16.9	24.6
English	19+	1.9	2.7	33.1	39.4
Maths	17-year-olds	1.9	1.5	26.4	24.6
Maths	18-year-olds	0.6	0.4	18.0	16.5
Maths	19+	3.2	2.4	39.3	33.9

GCSE (combined) science

Overall entries for GCSE (combined) science have decreased this summer when compared to summer 2016 (from 375,654 to 283,390). In general, students take GCSE science in year 10 and GCSE additional science in year 11. This year the entry from year 10 students is lower, because these students are waiting to take the reformed GCSE science qualifications that are available in summer 2018.

The change in entry has an impact on the overall results. In the past, year 10 students generally out-performed the year 11 students at grades A* to C. This year, although the results for 16-year-olds have remained stable, the overall outcomes are lower because the year 10 cohort has changed. This is shown in the table below for England.

Cumulative percentage at A* to C	2016	2017
Year 10 and under	63.6	35.8
Year 11	47.6	48.0
Overall	52.7	47.9