

Calculating Attainment 8 - Answers

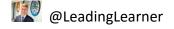
The "answers" to the calculating Attainment 8 exercise are not simply about checking the correct numerical totals have been determined; they hopefully provide snapshots of what might happen in terms of the changing curriculum and impact on the lower and middle attainers of the redistribution of GCSE point score.

The change from eight grades (letters) to nine grades (numbers) produces an increase in the number of points available for high attainers. Instead of 7 and 8 being awarded for A and A* respectively there is the potential to score between 7 and 9 points. In the 2017/2018 change from one system to another only the A* (point score = 8.5) will increase. It is likely that the point score of higher attainers increases over the next few years particularly as we move from 2016 to 2017 with the introduction of the numerical scale.

Overall the point score will dip quite significantly from 2016 to 2017 due to middle and lower attainers' point scores decreasing due to the reduction in points awarded for certain grades. In 2016 grades G to C will be worth 1 to 5 points respectively whereas in 2017 the same grades will be worth from 1 to 4 points with grades, E, D and C each worth one point less.

It's also worth remembering that the new "pass grade" will be a grade 5 which is equivalent to the top end of a current grade C. It is anticipated that this will reduce pass rates by over 20 percentage points; for example, instead of pass rates for English and Mathematics being in the mid-high sixties they will be in the low forties. This will also affect the percentage of students achieving a pass in the combined English and Mathematics which is likely to be in the high thirties.

The exemplar suggests that schools will move towards a greater percentage of students studying EBacc subjects, in response to the Government seeking to implement 90% of pupils studying the EBacc, and other subjects will see a decline in numbers. This will present a further recruitment challenge for schools who may, at the same, time also be implementing redundancy procedures or looking to retrain teachers so they can teach a different subject area. Teachers may well vote with their feet at this point. EBacc pass rates are likely to decrease as a percentage of pupils studying them from 2017 as the new Grade 4 pass rate is required in 2017 for English & Mathematics and 2018 for the other EBacc subjects.





Reviewing the Sheets

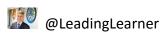
In an attempt to limit errors I approached the exercise in a systematic way looking to identify using a colour coding system which subjects should go in the English & Maths basket, the EBacc Basket and the Open basket

Colour Code	Commentary
English & Mathematics	The higher of English and English Literature counts as long as the pupil has been entered for both examinations. The higher will be "double counted" for the purpose of calculating Attainment 8. There is no suggestion that the pupil has to attain a grade and so some schools may focus on English and enter pupils for English Literature with little or no preparation. In 2016, Phil isn't entered for English Literature and so his English grade is only counted once but in other years, despite being ungraded in English Literature, his English grade is double counted thus increasing his overall Attainment 8 grade. This makes little sense educationally and it may be in future years changes are made so a pupil must attain a grade in both English and English Literature for the higher to be double counted or that the English & English Literature grades are added together for the purpose of calculating the Attainment 8 score. In 2016 Fatima's English Literature score is the higher of the two and so this is double counted whereas in 2017 her English score is the higher and hence double counted. Mathematics is more straightforward and the point score is simply double counted.
EBacc basket	Three spaces are included in the EBacc basket from the list of Science, Biology, Chemistry, Physics, Computer Science, History and Geography (inexplicably RE is not considered a humanities subject in terms of the EBacc) and a Modern or Ancient Foreign Language. The highest three are counted and unlike the performance indicator related to attaining the EBacc it is any three as opposed to two of the Sciences, one from History/Geography and a MFL. Note in 2016 Phil only has two EBacc subjects (Sciences) in this basket. The "empty one" has a negative impact on his Attainment 8 score.
Open basket	Again there are three spaces in the open basket which are taken by the highest remaining point scores from approved qualifications. This may include the lower of English qualifications and any EBacc qualifications not used within the EBacc basket.

Please note in some of the examples it is possible to use another one of the qualifications as opposed to those highlighted as long as they follow the rules above. For example, in 2016 Phil could have either the GCSE RE or Music qualification included in the open basket (I've highlighted Music but RE is equally valid as they both have a point score of 5). Similarly in 2019, Simon could have the MFL grade 4 included in the EBacc basket instead of one of the Sciences which were also grade 4.

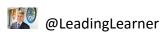


Subject	Fatima	Liz	Phil	Simon
English	A 1x7	C 2x5 = 10	C 1x5	B 2x6 = 12
Maths	A 2x7 = 14	B 2x6 = 12	D 2x4 = 8	C 2x5 = 10
RE	A 1x7	D 1x4	С	B 1x6
Science/Biology	A* 1x8	C 1x5	E 1x3	C 1x5
Science/Chemistry	В	C 1x5	E 1x3	C 1x5
Physics	A 1x7			
History				C 1x5
Geography		D 1x4		
English Literature	A* 2x8 = 16	C 1x5		B 1x6
Art				С
Design Technology			B 1x6	
Drama			B 1x6	B 1x6
MFL	A 1x7	C 1x5		
Music	A 1x7		C 1x5	
PE (GCSE)		E	D	
Total	73	50	36	55
Attainment 8 Grade	7.3	5.0	3.6	5.5
EBacc (Y/N)	N	N	N	N



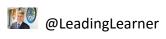


Subject	Fatima	Liz	Phil	Simon
English	9 2x9 = 18	4 1x4	5 2x5 = 10	5 1x5
Maths	8 2x8 = 16	5 2x5 = 10	3 2x3 = 6	5 2x5 = 10
RE	A 1x7	D 1x3	C 1x4	B 1x5.5
Science/Biology	A* 1x8.5	C 1x4	E 1x2	C 1x4
Science/Chemistry	В	C 1x4	E 1x2	C 1x4
Physics	A 1x7			
History	A* 1x8.5		C 1x4	D
Geography		D 1x3		
English Literature	8 1x8	5 2x5 = 10	U	6 2x6 = 12
Art				C 1x4
Design Technology			B 1x5.5	
Drama			B 1x5.5	
MFL	A* 1x8.5	C 1x4		C 1x4
Music				
PE (GCSE)		E		
Total	81.5	42	39	48.5
Attainment 8 Grade	8.15	4.2	3.9	4.85
EBacc (Y/N)	Υ	N	N	N



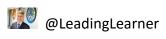


Subject	Fatima	Liz	Phil	Simon
English	8 1x8	4 1x4	5 2x5 = 10	5 1x5
Maths	8 2x8 = 16	5 2x5 = 10	3 2x3 = 6	5 2x5 =10
RE	6	3 1x3	4 1x4	6 1x6
Science/Biology	9 1x9	5 1x5	2 1x2	4 1x4
Science/Chemistry	8 1x8	5 1x5	2 1x2	4 1x4
Physics	8 1x8			
History	7 1x7		4 1x4	5 1x5
Geography		3 1x3		
English Literature	9 2x9 = 18	5 2x5 = 10	U	6 2x6 =12
Art				C 1x4
Design Technology				
Drama			B 1x5.5	
MFL	7 1x7	5 1x5	4 1x4	4
Music				
PE (GCSE)		E		
Total	81	45	37.5	50
Attainment 8 Grade	8.1	4.5	3.75	5.0
EBacc (Y/N)	Υ	N	N	N





Subject	Fatima	Liz	Phil	Simon
English	8 1x8	4 1x4	5 2x5 =10	5 1x5
Maths	8 2x8 = 16	5 2x5 = 10	3 2x3 = 6	5 2x5 = 10
RE	7 1x7	3 1x3	4 1x4	6 1x6
Science/Biology	9 1x9	5 1x5	2 1x2	4 1x4
Science/Chemistry	8 1x8	5 1x5	2 1x2	4 1x4
Physics	8 1x8			
History	8 1x8		4 1x4	5 1x5
Geography		3 1x3		
English Literature	9 2x9 = 18	5 2x5 = 10	U	6 2x6 = 12
Art				5 1x5
Design Technology				
Drama			6 1x6	
MFL	7	5 1x5	4 1x4	4
Music				
PE (GCSE)		2		
Total	82	45	38	51
Attainment 8 Grade	8.2	4.5	3.8	5.1
EBacc (Y/N)	Υ	N	N	N





Notes: