

ENTRY LEVEL CERTIFICATE MATHEMATICS

5930: Portfolio Report on the Examination

5930 June 2022

Version: 1.0



Introduction

The 5930 Specification for Entry Level Maths continues to have an increased uptake, particularly this year after 2 years when there has been no moderation of portfolios. A lot of centres were taking this qualification for the first time. Very few centres provided students with a mixture of internal and external components, but of those that did, nearly all used the AQA downloadable internal assessments, from allaboutmaths.aqa.org.uk. A few centres are still using materials from Classroom Resources, which unfortunately does not fit this specification properly.

This report on the examination is split into three sections:

- Externally Assessed Components
- Internally Assessed Components
- Administration

Many centres who have used this qualification over several years have improved their marking, hopefully taking note of the comments made on their previous Feedback Forms and using these published Reports on the Examination to help. These centres are to be commended on the presentation of their students, plenty of whom scored highly. Some new centres, who contacted their Coursework Advisor for advice, particularly as submission day was getting closer, were also very thorough in the portfolios that they submitted.

However, this year there has been a high number of administration errors. This may be due to the fact that there has been no moderation since 2019, but all centres received an email from AQA reminding them of the required forms that must accompany work, from all moderated courses. The team of moderators for this course reported that they have had to send several emails to Exam Officers to request missing paperwork. There has also been an increased number of errors in marks submitted via e-submissions, which has also required moderators to fill in extra paperwork and wait several days, or, in some cases, weeks before Exams Officers amended the scores. These points are mentioned later in this report in a bullet list that, hopefully, will act as a check list for Exams Officers and Subject Co-ordinators. These errors have made moderating much more difficult, as marks could not be submitted to AQA by the moderator until all aspects were complete.

Externally Assessed Components

When this specification was updated in 2015, ready for first testing in the summer of 2017, specimen tests were created to demonstrate the style of the 'live' external assessments, which were not yet written. This year there have been around 25 to 30 centres who have submitted the specimen assessments as part, or all, of the portfolios. These specimen tests carry no marks and cannot even be used as internal assessments as there are not enough questions to demonstrate competency of an outcome. They are also not held in the secure area of AQA and are available for anyone to access. The 3 sets of 'live' assessments must be kept secure both before and after being taken. This is such a shame for the students, who may have to be withdrawn or re-take 'live' assessments, depending on a decision made by the centre.

In September 2018 some of the assessments and their mark schemes were also updated on the AQA secure website and centres were notified about this. There were also some minor changes to question papers, much of which was cosmetic, and the comments column on the mark schemes were updated to give more guidance to help centres apply the marks. Some centres have not used the updated assessments, and this has been mentioned on their Feedback Forms. To try to

eradicate these out-of-date 1.0 versions, I asked moderators to notify Exams Officers straight away so that they could download the current versions and destroy the out-of-date versions. AQA are making sure that all the assessments to be used should have version 1.1 in the footer except Component 4, where the most up to date version is 1.5, because of changes to the £5, £10 and £20 notes.

In all the assessments no marks are lost for incorrect spellings. A lot of centres mark these as wrong. As long as the intention is clear then the mark can be awarded. I have seen lots of interesting ways to write 'Autumn' but they all 'sound out' correctly.

Please remember that if a student is unsuccessful at a particular component then they can sit another version of the assessment to try to improve their overall total score. A portfolio can be made up of assessments from all 3 sets and only the version used for the final total of marks needs to be sent to the moderator in the portfolio. If a student is really struggling with a component then it might be more appropriate for that component to be taken as an internal assessment, where usual classroom assistance can be given and extra questions can also be used to supplement the AQA-produced sheets to demonstrate competency. Corrections are also allowed on internal assessments and should be flagged up on the work.

The marking of external assessments has thrown up errors that happen series after series:

- Students not writing their centre number and candidate number on the front of their assessments, and centres not checking this.
- Students writing in pencil when the front of each paper states that black pen must be used.
- Markers writing correct answers alongside an incorrect answer or showing the correct
 calculation to the problem, which must not happen. These are external assessments,
 comparable to GCSE papers, and must be stored exactly as the student has written them,
 with the marking in the right-hand column and no other annotations. They should not be
 given back to the student but should be secured somewhere safe ready to send to a
 moderator in either May or January.
- Incorrect addition of scores for an assessment. This is often because the marking is not done in the recommended way. There should be a score in the right-hand column next to the mark available for that question. This should be 0, 1, 2 or 3 (as appropriate for the question). This makes it easier to add up page totals and then final totals without error. Do not circle these scores in the margin, as sometimes it is difficult to differentiate between a zero and a one. Answers can be ticked as well, but the scores are essential. Some markers put circles round the number of marks available or put lines through if the question is wrong. This is not adequate and leads to errors. It is helpful if a second person could check the totals once marking has been completed and also check that the correct scores have been carried over onto the Candidate Record Form. If there is a second marker then they should not make comments, such as 'agreed' but tick the score being awarded in a different colour pen. If there is a change then the first mark can be crossed out and substituted with the new checked mark. Moderators can then check that all questions have been marked and the correct total score has been given.
- Marking being done in the same colour pen as the student. Please use a distinctive colour like red or green for marking, to make it obvious that the paper has been marked.

- Incorrect marking of questions, where simple right answers are marked as wrong and vice versa. If the published mark schemes were used as they should be then these simple errors would not occur. Even simple one-mark questions sometimes have an additional remark in the 'comment' column, for instance a number being allowed instead of a name. Some of the marking errors that occur are often around follow-through marks, following an incorrect answer to the previous part of the question. There is additional marking guidance given in the 'comment' column on the mark schemes, which should be followed. If there is a query over how to mark a question, the AQA '5930 Coursework Advisor' can be contacted via email for additional help and guidance.
- Marks being given for a question when the student has given two answers. If this happens
 for a one-mark question, then no marks can be awarded and a zero should be written in the
 margin.
- Multi-mark questions are very often marked incorrectly. The mark schemes are very thorough and there are plenty of helpful comments. Students often get full marks for a question with no working seen, but centres don't read that comment and do not give the candidate enough marks.

Component 1 - Properties of Number

This component continues to secure high marks for students and many have achieved full marks, even though their marks on other components are lower. The most common marking errors are for the place value question. There are lots of allowable ways for a student to write the value of a digit. They are all included in the mark schemes.

Component 2 - The four operations

Calculators **must not be used** in this component, but I have seen many students writing answers only, without evidence of a written method, which leads me to suspect that calculators are being used in some centres. Students at Entry Level would find most of these questions very difficult to answer unless they wrote down their method, especially in the two-stage questions. As this is one of the weaker components, students would benefit from additional practice, using worksheets, before attempting this component as an external assessment. There are some questions that carry more than 1 mark and students need to show their methods so that part marks can be awarded if the final answer is wrong. The mark scheme gives several variations that secure marks.

Component 3 – Ratio

This is still a difficult component for many students. Students understand shading of sections, but shading is, overall, very slapdash, and it could be argued that they have not shaded the required fraction because of this. Centres could give students practice at shading, emphasising that to achieve the mark then the shading must be completed more accurately. Candidates at Entry 2 and Entry 3 find completing a number pattern going up in halves, thirds or quarters difficult, and candidates at Entry 3 still have a lot of difficulty with outcome 3.4, which is to work out any number of thirds, quarters, fifths or tenths of an amount.

Component 4 - Money

This component continues to be the one that has the most marking errors. I have seen up to 8 marking errors on one paper. Markers must follow the published mark schemes exactly. There are instances now where units are not needed, although students should still be encouraged to write the units on all their answers. The instances are mainly when students have been given the coins or notes to use. However, if students are asked to make a value using 6 coins then a 1 could be 1p or £1 and so those units must be present. Marks also continue to be awarded by centres when a student uses a non-valid coin, for example, making 13p with 10p and 3p coins!

There are also several condoned answers, where a 'p' is allowed at the end of the answer, but some centres mark this type of answer wrong, for example, £13.50p is acceptable, although £13.50 is the correct way to write this amount. Students should be taught that the correct notation for money is in the form £3.65 not £3.65p, even though the mark scheme condones this incorrect version. Please also note that 0.75p is not the same as 75p or £0.75

Markers should be aware of follow-through marks. For example, there are two questions on Set 1, 13(b) and 19(b), that allow follow-through answers from an incorrect response on 13(a) or 19(a) respectively, and these are often marked incorrectly. The main example of this is when the student answers 19(a) as £78 instead of £137.50, then gives the answer £62 in 19(b), which should gain a full 2 marks as a follow-through. This continues to be the most common marking error.

There are also some 2-mark questions where the correct answer without any working out seen gets the full 2 marks and this is mentioned in the comments column on the mark scheme but often only 1 mark is awarded. In the case of the 3-mark question in Set 1, there is an answer of 'No' for the final mark but it can only be awarded if there is some working out that the student can use to make their decision. If they just answer 'No' then no marks can be awarded.

Component 5 - The calendar and time

Marking of this component continues to improve. The lengths of hands when drawing a time on a clock face aren't penalised, but the hour hand must be at least 'on' the correct hour for a mark to be awarded. Students should be taught about drawing hands on a clock face prior to taking the assessment, and should know that the hour hand moves from one hour to the next on the clock as the minute hand moves round. Some students who gain marks from drawing hands on a clock face do not understand about the length of hands, as they write down the wrong time when reading a clock, by getting the hour hand and minute hand mixed up. Even in these days of digital clocks this is still a skill that needs to be taught.

As this component requires accurate drawing, some students may need a scribe to enable them to achieve all the marks, and if so a JCQ Form should accompany the work.

Component 6 – Measures

There continues to be improved marking for the questions that use a centimetre grid to measure a line, which is an Entry One outcome. These questions state that the grid must be used. Centres must follow the mark scheme and not give a mark for an answer where the line has been measured with a ruler. However, in this component, some questions require precise measuring and have comments to ask centres to check the length of images on their printed papers, allowing the 2 mm tolerance either side of the true measurement, as distortions can occur when photocopying. This distortion error also applies to the question on the length of a perimeter as there can be distortions on all the lines, so centres need to measure these carefully before marking. It is not recommended to reduce the size of any of the assessments, particularly an assessment on measurement, so centres who use papers reduced to A5 need to carefully measure the reduced papers before marking.

Metric units still cause difficulties for many students. They find it hard to add the correct unit to an item (outcome 2.3), convert from one unit to another (outcome 3.2) and also still find it difficult to select lengths in different units, such as metres and centimetres, and compare the total to a requirement (outcome 3.1). The questions that have the most marking errors are the last questions on all 3 sets. If the answer is wrong, and the mark scheme gives all correct answers, then 1 mark can be awarded for evidence of changing units. Some centres do not check the mark scheme, as they award a student full marks for using the same length multiple times, when in each question there is only one of each length.

Component 7 – Geometry

This component continues to be well done. Students who may not reach Entry 3 overall can often answer Entry 3 questions. They can recognise shapes and solids and describe their properties. They still have most difficulty identifying horizontal, vertical and parallel lines. Teaching of these terms and students having practice before taking the assessment would be helpful.

Rulers and pencils are still not being used for the drawing questions. When asked to draw a rectangle, even though they get a mark when the intention is clear, students should be encouraged to use a ruler.

Students show understanding of symmetry, but are careless when drawing lines freehand without a ruler, often drawing their lines outside the 2 mm tolerance or drawing one or two feathered lines near each other. When these questions are marked, the 2 mm tolerance is often not applied, and questions are marked as correct when the lines are out of tolerance. In Set 1, Q14, the horizontal line must go all the way across the circle to gain the mark and must be within a 2 mm tolerance of the correct line. Markers should use a ruler when marking this question.

Component 8 – Statistics

I am repeating comments made in previous reports as they all still apply.

Students must be encouraged to use a ruler and a pencil when completing graphs, which should be drawn in the style of the bars or blocks already drawn. If not drawn in that style, the response should be marked as incorrect. Drawing on a line graph means that the student must draw a line, not a bar, and drawing on a bar graph must be a bar. Untidy graphs are still being seen, often with no drawn edge to the top of a bar chart or block graph.

Care should be taken when marking 'tallying in 5s' as there should be 4 vertical lines and 1 diagonal/horizontal line to make the 5. Some candidates still have incorrect tallying marked as correct. The completion of a tally chart, outcome 2.3, continues to be marked incorrectly when frequencies, instead of tallies, are written in the tally column of the table. The new mark scheme says that markers should 'condone frequencies added' for Q6a in Set 1 but this is only when the tally marks are also present, not for frequencies without tallies.

In the question testing use of a frequency table, outcomes 3.4 and 3.5, students get a mark for evidence of tallying in 5s, then they also gain a follow-through mark for converting 'their' tallies correctly into the frequency column, irrespective of whether the tallies were correct. If the frequencies are correctly converted from their tallies, they gain the final mark.

Internally Assessed Components

Very few centres used internally assessed components this series, and those that did mostly used only the AQA downloadable sheets. These resources provide good classroom practice before taking external assessments and are annotated correctly, fulfilling all the requirements for each outcome. Please note that a lot of the worksheets comprise two pages and have a box at the bottom of the worksheet that can be ticked to show awarding of an outcome. If the outcome has not been awarded, a comment for the moderator would be very useful.

Nearly all centres awarding outcomes from internal work have had their assessments agreed by their moderator. Most centres get students to complete all the worksheets for a component without using the process of subsuming. Moderators have reported back that only a few outcomes have been generously awarded, but overall, candidates have performed well with internally set assessments.

Some centres do not always appreciate that students do not have to get 100% on the internal work to be awarded an outcome. In this situation, centres are too harsh in their assessments and the moderator can award the outcome after checking the work. The assessor can award the outcome even if there are a few errors in the student's work. If over two thirds of the answers are correct, and the assessor has seen enough correct answers to support the outcome, then the moderator will support the assessor's decision. Each question should be marked right or wrong so that the moderator can see which questions have been answered correctly. A global tick at the bottom of a page should not be used, and annotations on the internal work are always very useful. This year, some moderators have noted that questions have not always been correctly marked, so marking correctly is as important in internally-set assessments as in the external assessments.

Please take care with internal work for Component 4 – Money. It is expected that answers will only be deemed to be correct if the students include the '£ or p' on their answers, as in the external assessment. Remember that corrections are allowed and that students should be taught to include the units as, for example, a 2 could be a £2 or a 2p. It is good practice to get students to correct their answers with the appropriate units, which will help them as they move up to GCSE.

Administration

There were a lot of problems this year with centres not sending the required administration. AQA sent an email on 1 April 2022 to all Exams Officers. This communication reminded all Exams Officers of the paperwork requirement for NEA entries: "When sending students' work, please remember to include the relevant record forms for each subject. These include centre declaration sheets and candidate record forms."

However, this requirement was not followed by so many centres that moderators became quite frustrated at the repeated number of emails they had to send, when centres still did not send the required documents.

Marks must be submitted by 15 May, and the majority of centres did follow this. Once the marks are submitted the sample is then expected to arrive with the moderator within 5 days, but many centres had to be emailed and then phoned to ask them to send the work.

This series, there have been fewer portfolios in plastic wallets, but several centres have sent just a pile of assessments, not treasury tagged together to form a portfolio. If these loose pieces of paper get dropped, then there is no way that the moderator can put the correct work for each student together correctly. Usually, the Candidate Number is only on the front sheet of an assessment and some assessments aren't stapled together to form a test paper. Please put the assessments together with a treasury tag through all components in the portfolio.

This series there have been many errors found on submission of scores into e-submissions, or in transferring scores from the assessments to the Candidate Record Form. If there has been a mistake, then the Moderator has to send an Adjustment Form to the centre asking for the marks to be altered. Marks for assessments have also been added up incorrectly and in most situations this has been because the marking has not been done in the manner stated. Please double check anything to do with marks.

The bullet points below highlight the main administration errors. It would be useful to centres to use this as a check list before sending off their sample.

- A signed Centre Declaration Sheet missing from the sample this form must be included.
- A signed Candidate Record Form missing, or not filled in correctly, which must be at the top of each treasury tagged portfolio with correct addition of scores.
- A missing Candidate Record Sheet, which is only required if there are internally assessed components. It must have ticks against the outcomes being claimed, but quite often it was a blank form with no ticks or score at the bottom of the column for the included component. This form is not required if there are only externally assessed components.
- Marks not being submitted by the 15 May, or 10 January for the autumn series, and portfolios
 not arriving with the moderator five days following submission of marks. If there is going to be
 a delay, then inform the moderator and ask for an extension with AQA.
- Centres not responding to moderator emails, meaning the moderator needs to send further emails or make phone calls.
- A missing JCQ form when a student has had a scribe or a reader.

The following errors continue to be made when putting together portfolios:

- Plastic wallets or folders/files have been used, whereas portfolios must be secured with a
 treasury tag, with the Candidate Record Form on top, followed by the Candidate Record
 Sheet, which is only required if there are internally assessed components. Do not stick
 assessments into exercise books as they must be kept secure once completed.
- Incorrect addition of the eight scores on the Candidate Record Form when this happens some students may end up with a level different to the one they expect, if the incorrect score straddles a grade boundary. For example, if a student's score should be 193, but was added to 189, they might be awarded Entry Level 2 rather than Entry Level 3. This may not be picked up at moderation if that student's work has not been selected for moderation by the esubmission system.
- Centres failing to award 'subsumed' outcomes on internally assessed components, which can
 be easily spotted on the Candidate Record Sheet, as they are the outcomes in brackets. If an
 outcome has been completed and there is another outcome in brackets on the sheet, then this
 outcome can also be awarded. Evidence does not have to be seen for the subsumed
 outcome.
- Centres misinterpreting the specification and sending both internal and external assessments
 for the same component. This can be identified on the Candidate Record Form, by checking
 that there isn't an empty row with no mark, or when treasury tagging the work in component
 order, making sure there is something from each component in numerical order.
- Centres sending everything the student has completed, rather than just the work that is being used for the award. It is only necessary to send the final assessments used for the total score.

Overall, candidates have scored well this series, with lots of marks over 200, despite having 2 years of disrupted teaching and learning due to the pandemic. There are very few students at the lower end of scores. Those that have very low marks are usually those students who only have a few completed components, rather than the full eight. However, because the grade boundary marks may change from year to year, centres should try to make sure that students achieve as

many outcomes as possible and re-take external assessments to maximise the total marks achieved. This should enable the majority of students to move forward onto GCSE Mathematics post-16.

Please note that each centre has a Coursework Adviser who can be contacted to help with any questions. If a centre does not have details of their coursework advisor then AQA can be contacted to provide details – please email maths@aqa.org.uk to request the information.

Use of statistics

Statistics used in this report may be taken from incomplete processing data. However, this data still gives a true account on how students have performed for each question.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results Statistics page of the AQA Website.