



Pearson

Examiner's Report Chief Examiner Feedback

Summer 2018

Pearson Edexcel GCSE (9 – 1)
In Mathematics (1MA1)

This document also references other qualifications within the Pearson Edexcel portfolio of mathematics qualifications.

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Summer 2018

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GCSE (9 – 1) Mathematics – 1MA1

Chief Examiner Feedback

Introduction

This report is written for centres. It will focus primarily on the GCSE (9-1) Mathematics 1MA1 qualification but will also make mention of other related qualifications in the Pearson Edexcel Mathematics portfolio.

This is a general report, summarising and providing some overall detail. For specific detail relating to individual questions, mark schemes, and grade boundaries centres are referred to the paper reports produced by individual Principal Examiners, and other specific reports issued. These are available on the Pearson Qualifications website as well as the Mathematics Emporium website at www.mathsemporium.com

In the Summer of 2018 the new GCSE (9-1) Mathematics 1MA1 qualification was taken for the third time. The legacy Entry Level Certificate in Mathematics (ELC) was also offered for the last time, with a new Entry Level Certificate being introduced for 2018. The legacy GCSE Statistics qualification was offered for the last time in June 2018 with a new GCSE (9-1) Statistics to be taken in June 2019. Edexcel Awards remain the same.

Entry Figures

The table below shows the number of candidates that were provisionally awarded a GCSE Mathematics grade for 1MA1 this summer. Comparison with last year is difficult, since the entry was split between two qualifications (1MA0 and 1MA1), but it is noticeable that the percentage of Foundation Awards increased overall from 49.9% in summer 2017. From the quality of candidate responses it appears that the centres this year had a better idea of the standards required at Foundation and Higher and were able to make a more informed judgement of which tier to enter candidates prior to making entries.

1MA1	Number	%
Foundation	236,873	53.7%
Higher	202,081	46.3%
Total	441,105	

The point was made last year that the set of papers for the new 1MA1 qualification were designed with the expectation that more candidates would be entered at Foundation than was previously the case. The change in the above figures reflects this and shows a greater confidence in centres in respect of entry patterns. It is hoped that confidence will be confirmed by the results once published.

Changes between Summer 2017 and Summer 2018

Following the set of 6 papers taken in Summer 2017, we reviewed the performance of the papers and listened carefully to feedback from centres. At Pearson we are committed to producing quality assessments in mathematics that are not only fit for purpose, but are also accessible to all students, within the framework that is set by the regulator Ofqual. Anyone wishing to review this framework will find these following documents useful:

[GCSE 9-1 Mathematics Subject Level Conditions and Requirements for Mathematics](#)

[GCSE 9-1 Mathematics Subject Level Guidance for Mathematics](#)

But within this framework we do try to find a balance, and to this effect centres did see some changes in the Summer 2018 papers.

Based on our review of the summer 2017 papers and the feedback we received from centres, we made a number of [improvements to our summer 2018 papers](#). Some of these changes included increasing the accessibility of the front end of the Foundation papers and questions at the top end of the Higher papers, whilst still retaining the grade 9 challenge, and having a greater cognisance of the arithmetic demands within other mathematical contexts, particularly on the non-calculator papers.

A number of centres commented positively that the last paper of the three Summer 2018 papers at each tier was perceived to be the more challenging, and that this enabled candidates to better access the first two papers without feeling discouraged. We also received comments about why a particular aspect of content was "missing". Even with three papers there is insufficient capacity to test everything every year, but we do strive to cover as much as we can. Some content should be assessed at different levels over time, or within different assessment objectives. Within the regulatory framework of setting GCSE Mathematics papers we therefore strive to achieve a balance *over time*. This may mean that a particular topic may not appear each year. It is also worth reminding centres that GCSE Mathematics is available in both June and November, and content coverage is enabled across both series, so a topic may therefore be tested in November instead of June.

The style of the mark schemes have also changed. Centres can remain assured that the way that we assess candidate performance has not changed; the newly

styled mark schemes show centres some additional guidance on marking candidate responses. This is in response to some requests from centres who want to try to ensure that their centre marking of past papers is as close to examiner-marked scripts as possible. The final set of Mock papers (Set 4) will also be accompanied by a set of newly styled mark schemes when published during the Autumn term.

GCSE entry for grade 4/5 candidates

As stated above, it is encouraging to find an increase in the proportion of grade 4/5 candidates entered for Foundation. The changes made in the Foundation papers will give these candidates a better experience which it is hoped will give them the confidence to continue with their use or studies of mathematics. Centres also need to continue to have greater confidence in their tier entry decisions and need to continue to consider carefully their grade 4/5 candidates, and whether indeed Foundation would be a more appropriate choice for an entry, instead of Higher.

GCSE entry for grade 1/2 candidates

The changes that were made to the Foundation papers aided in giving these candidates a better start on their GCSE papers, but inevitably there will always remain a significant proportion of the papers that will be beyond their reach.

We will continue to look closely at the performance of various questions, and the design of these questions, particularly at the lower end of the Foundation papers, in order to try to create a situation where grade 1/2 candidates have greater access to the GCSE papers. For the lowest ability candidates centres may wish to consider perhaps also entering for the new Entry Level Certificate, which has been re-written to better match with GCSE 9-1 Foundation papers (see below). This new specification experienced a significant increase in entries this year, with many centres using both qualifications to the advantage of many candidates.

GCSE entry for 8/9 candidates.

One of the objectives of the reformed GCSE qualification is to provide greater challenge, and to close what has been a considerable gap between GCSE and GCE examinations in Mathematics. The papers should also allow differentiation at the highest grades. There will always be a debate about the issues of making the papers challenging, and yet not putting off candidates from considering GCE courses, that is acknowledged. A debate of similar significance is whether this can be achieved by having a larger number of demanding questions at the end of the paper, or whether this can be achieved by an expectation that these higher ability candidates need to obtain a much higher proportion of the marks throughout the paper, but particularly across a range of topics at Higher level. The latter aids accessibility for all, so we adjusted the balance slightly for the

Summer 2018 papers, whilst still meeting all requirements. The collection of questions at the end of the Higher papers will continue to give adequate challenge for the brightest students, without necessarily putting off students of lesser ability taking the Higher papers.

Overall candidate performance.

Before mentioning any particular aspects of performance, it is worth making some comparisons with the performance of previous years. Many centres have been using the free Mock papers published by Edexcel, and their candidates have benefited from the exposure to the new style of 9-1 GCSE Mathematics papers. This, coupled with the additional past papers available from Summer and November 2017, meant that centres were better prepared for the papers in Summer 2018. And that showed in the overall performance of the candidates, which showed progress at both Foundation and Higher.

The confidence with which candidates approached questions, at all levels, was impressive. The vast majority of candidates made an attempt at nearly every question on each of the three papers that they took. It was only towards the end of papers that some non-attempts were seen, which is not unexpected. The willingness of candidates to have a go, irrespective of the type of question, is commendable. Candidates have always found some difficulty in answering questions that require an explanation, a deduction, or a written response. It was noticeable that a much greater proportion of the candidates were prepared to make attempts at these types of questions, and indeed their performance was significantly better than last year.

From the evidence of the papers, it would appear that an improved proportion of candidates were using the correct equipment in those questions which required it and were showing good use of calculators. It remains a concern, however, that a noticeable minority lost marks through not having a calculator on calculator papers or failed to demonstrate use of basic equipment when required. This includes protractors and compasses.

The showing of working out continues to be an issue for some candidates. This becomes a significant issue in those questions which clearly state "you must show all your working", "give reasons for your answer", "prove", etc. where even a correct answer will not get full marks, without the necessary supporting working. This is more of an issue on calculator papers, where some candidates become over-reliant on performing the required process on their calculator without copying that process into the working space. Even the most basic of calculations should always been shown. Of course, we all know this; if we all had a pound for the number of times we have told them in the classroom... but this report would be incomplete without its mention.

The other issue with working out is in relation to multiple methods being shown. Candidates should not be discouraged from having multiple attempts to solve a

question, or even drafting out a process before finalising their work. But examiners need to be clear the intended work the candidate wants marking. Before a candidate moves onto the next question, they should cross through (that is, not blanked out, scribbled over, rubbed out or in some other way defaced so as to be illegible) any working that they do not want marked. Of course, making sure they leave work that they do want marked! There was an increase this year in examiners reporting cases where they were faced with multiple methods; if it is not unambiguously clear, even given an answer, then they are instructed to award 0 marks.

It is disappointing that I have to report a decline in the overall standard of presentation of work. This is not related to showing working, but about how candidates present their work: legibility. At a basic level some candidates write 4s and 9s as to be ambiguous, whilst 1s and 7s also present issues for examiners. Candidates who over-write work then make it illegible: please cross it out and write it again! Any ambiguity in working or answers in these respects will result in the loss of marks. With an increase in response-type questions in 9-1 papers the need to write (words) legibly is also becoming more important in Maths papers. Whilst the proportion of candidates attempting these types of question has increased, the legibility of their responses has declined; this is not about their chosen words in their response, but more about whether the examiner can actually read the words they have written. If the response cannot be read, it cannot be marked. In many cases these problems are inherited by mathematics teachers, but if we desire to increase the performance of candidates, then it must start with these very basic issues and teachers should have attention to changing the presentation methods of individual students. This is not just about examinations, but about ensuring they are ready for the work-place. And finally, a reminder that candidates should give their answers in English. We have an exceptional team of examiners marking the work of candidates, but they rarely have the capacity to translate written responses given in a foreign language (and must not be expected to!)

But we must thank centres for all the work they have been doing with their candidates for the last 12 months. Overall the performance has improved, candidates are showing a greater awareness of what is expected of them and giving us a greater degree of evidence on which to award marks. Answers to response-type questions and to problem solving & multi-step problems have shown improvement. The work of centres in preparing candidates was clearly evident. A job well done for this cohort. Hopefully this report, and those of all the Principal Examiners, will assist helping centres with the next cohort.

The notes in the remainder of this report are designed to assist centres in preparing future candidates in specific aspects of the specification. More detailed information, particularly in respect of individual questions, can be found in the individual paper reports prepared by each of the Principal Examiners.

Foundation tier

Number

Manipulation of numbers is an apparent weakness. Whilst arithmetic processes appear to be sound in most cases, their ability to carry out those processes is frequently flawed due to poor arithmetic processes, particularly division. This is most apparent on the non-calculator paper, but is also evident on calculator papers, particular when non-calculator methods are used (an absent calculator?). There is also some deficiency in recall of basic multiplication facts. Rounding of numbers has improved, but still presents difficulties when rounding to a stated number of significant figures.

Equivalent fractions seem to be better understood, even when ordering fractions, though a decline in performance was seen in some work where fractions needed to be processed, particularly where division was involved.

Basic numerical problem solving continues to be done well, particular when the context is money, but not as well when use of other units was required, or some conversion between units was needed.

There has been some improvement in understanding numbers written in standard form.

Although many understand sets, there still remain a great number who do not understand the concept of union or intersection, or their association with a Venn diagram. Since several marks on a paper are linked to this understanding it may be worth greater emphasis.

In the advent of the digital age we have made no impact on common misunderstandings relating to time, and an inability to use a timetable, particularly in the context of planning a journey.

On a non-calculator paper the key word "estimate" should be a trigger to start some (sensible) rounding of numbers before processing, rather than a prompt to start complex calculations. Note that all sensible forms of rounding are acceptable, not necessarily just to one significant figure.

Algebra

At this tier performance in the basic skills of algebraic manipulation have continued to improve when compared to previous series, even factorisation; the work of centres in emphasising this with Foundation candidates was rewarded with greater success in this area.

Both expansion of brackets and inequalities continue to show some improvement, though performance is usually inhibited when negative signs are involved. This was demonstrated well when candidates were asked to draw a graph given in the form $y = 1 - 4x$. Whilst graph drawing is usually done well, this simple change in form, introducing more negative work, was a major

inhibitor to success. Equally in drawing a quadratic graph the positive values would normally be done correctly, but not the negative values; few used the symmetry properties of a parabola to check their values before plotting. In this latter case far more than previously joined to give a curve rather than line segments.

Substitution into formulae has improved and is no longer a weakness, though any success of using formulae appear to depend on the context in which that formula is being used. I suspect rearranging a formula to make a variable the subject will remain a weakness for some time at Foundation.

Derivation of algebraic expressions for the solution of problems continues to be a weakness, indeed, there has been a slight deterioration at Foundation level this year. The exception is when derivation occurs within work on numbers sequences, which continue to be done well.

Simple coordinate geometry work is not done well at Foundation tier. Beyond drawing a simple graph of an equation, there appears to be little understanding of the relationship between equation and graph, between graphs, of parallel lines, or finding an equation from a straight-line graph.

Trial and improvement methods continue to haunt algebraic solutions. If they lead to the correct answer then the full marks will continue to be given, but this is rare: frequently their lengthy toil results in an incorrect answer, or they give up trying: either way no marks are awarded. Another method that is flawed in most cases seen is the method of flow diagrams to solve equations. Again, if these result in the correct answer full marks are awarded, but if used for all but the simplest equation, candidates are so prone to making mistakes in inverting or ordering operations that no marks are usually earned, unlike those who use more traditional "equation balancing" methods, where part marks can usually be given.

Ratio, Proportion and Rates of change

There remain too many candidates who make it more difficult for themselves on a calculator paper by attempting partitioning methods when working out a percentage. On a non-calculator paper, or those using non-calculator methods, the most common approach is a "build-up" method but frequently candidates have difficulty piecing together the various parts, for example finding 5% having found 10%, a division by 2 not obvious to many. Finding a percentage change is still not understood, but for many candidates working out percentages was frequently done well.

It is clear that centres have been spending more time on ratio and on relationships between numbers, since performance on questions involving these has increased slightly, though overall ratio and use of scaling factors still remains a weakness. Proportion questions are sometimes mis-read, resulted in a relationship being inverted. Division by a ratio is now usually well done, but the

demands become too great when two or more ratios are linked in a question. Writing numbers in ratio form is usually correct, though some fail to simplify their ratios, even when asked to do so. Surprisingly use of scale diagrams is a weakness.

Any question which uses compound rates presents a challenge for Foundation students. Speed, density, pressure and any context involving proportional units are frequently misunderstood.

Geometry and Measures

Candidates' recall of essential formulae remains a weakness at Foundation, in particular those for the area of a triangle or trapezium, and those related to the circle. Use of technical terms also remains a weakness, for example in giving geometrical reasons or in describing a transformation, where non-standard terminology cannot be accepted.

General weaknesses still persist in handling and converting units. It is surprising how many candidates do not know the difference between area and volume, for example finding surface area of a triangular prism when the simpler volume calculation has been requested. Candidates need to remember there is usually one question in which they have to state the units.

Otherwise mensuration work in problem solving appears to show little improvement; the main issue is that candidates do not always read the question fully, and therefore leave out essentially parts of the process to finding a complete solution.

Work involving 3-D has proved problematic in the past, but this year was met with greater success. This included drawing an accurate front elevation from a 3-D diagram (though some got the lengths wrong).

Work involving both Pythagoras and simple trigonometry were generally well done at this tier but finding the sum of the interior angles of a polygon continues to be a weakness, with many just assuming it is always 360° irrespective of the shape.

There seems to be a better understanding of vectors at Foundation, with far more candidates gaining marks; clearly an area that centres have been focussing on, to the benefit of candidates.

Probability and Statistics

There remain a range of types of graph that candidates need to be familiar with. From year to year various graphs and diagrams will be used in assessment. This year a composite bar chart was used and many demonstrated significant weaknesses of interpretation that need to be addressed for future papers. The pie chart was attempted far more positively, though with some evidence that

protractors were being used inaccurately (or they did not have one). A question involving a frequency tree diagram was very well answered, a strength, as was a question involving a stem and leaf diagram (though the key was frequently missing). Candidates did better than last year in questions that asked for some criticism of a statistical diagram, the only flaw being when answers given were too vague to attract credit or contained contradictory statements. But many candidates are now, to their credit, putting in as much detail as possible when answering this type of question. They just need to make sure that what they write is correct.

Statistical calculations were normally well understood, with only a few candidates mixing up the terms eg giving the mean for the range etc.

Probability appears to be well understood, even in the context of tree diagrams and more complex problems. There are no remaining issues with notation: rarely do any candidates use anything other than standard probability notation in giving their solutions.

Higher tier

Number

Manipulation of numbers remains a weakness for some at this Higher tier. Whilst arithmetic processes appear to be sound in most cases, their ability to carry out those processes is sometimes flawed due to poor arithmetic processes, particularly division. This is most apparent on the non-calculator paper, but is also evident on calculator papers, particularly when non-calculator methods are used (an absent calculator?). Equivalent fractions seem to be better understood, and the 4-rules of fractions.

Rounding of numbers has improved, but still presents difficulties when rounding to a stated number of significant figures, or when rounding is carried out prematurely within a process of calculations.

Although many understand sets, there still remain a great number who do not understand the concept of union or intersection, or their association with a Venn diagram. Since several marks on a paper are linked to this understanding it may be worth greater emphasis.

On a non-calculator paper the key word "estimate" should be a trigger to start some (sensible) rounding of numbers before processing, rather than a prompt to start complex calculations. Note that all sensible forms of rounding are acceptable, not necessarily just to one significant figure.

Most understand standard form numbers but calculating using standard form numbers is a weakness. Those who knew how to perform standard form

calculations on a calculator had greater success with standard form number on the calculator papers.

Bounds is a topic that remains misunderstood. Whilst upper and lower bounds can be stated, candidates rarely progress to using the correct upper or lower bound in solving related questions.

Algebra

At this tier performance in the skills of algebraic manipulation have continued to improve when compared to previous series, even factorisation; the work of centres in emphasising this with candidates was rewarded with greater success in this area.

Both expansion of brackets and inequalities continue to show some improvement, though performance is usually inhibited when negative signs are involved. Equally in drawing a quadratic graph the positive values would normally be done correctly, but not necessarily the negative values; few used the symmetry properties of a parabola to check their values before plotting. In this latter case far more than previously joined to give a curve rather than line segments. Using drawn graphs to find solutions to equations was far less successful. Further errors come when candidates do not take sufficient care with accuracy in drawing graphs; this also applies to sketch graphs, which still require some accuracy at points crossing the axes. Unfamiliarity of the graph of $x^2 + y^2 = r^2$ is weak, yet this topic is within reach of many candidates working towards the higher grades.

Substitution into formulae has improved and is no longer a weakness, though any success of using formulae appear to depend on the context in which that formula is being used. For example, whilst substitution into basic formulae was generally good, substitution into functions (particular composite functions) was poor. Work on indices is beginning to show improvement.

Trial and improvement methods continue to haunt algebraic solutions. If they lead to the correct answer then the full marks will continue to be given, but this is rare: frequently their lengthy toil results in an incorrect answer, or they give up trying: either way no marks are awarded. In contrast candidates have already demonstrating sound understanding in using the new topic of iteration in the solution of equations.

Weaknesses persist in factorising trinomials and in rearranging more complex expressions, for example relating to algebraic fractions and making the subject of. This also applies to the multiplication of brackets where there are negative signs.

Derivation of algebraic expressions for the solution of problems needs far more practice. This is also the case when algebra is used as a catalyst for solving problems, eg angles expressed as algebra in geometry problems. Candidates

should note that algebraic proof does NOT involve substitution of a range of numbers, though there is less evidence of this over time.

Some aspects of coordinate geometry work are showing improvement at Higher tier. There is a better understanding of the relationship between equation and graph.

Problem solving using coordinate geometry has also shown some improvement, particularly in finding equations with a gradient of negative reciprocal but finding an estimate of the speed from a time/distance graph was not done well, perhaps because they did not realise that a tangent to the curve was needed (some tried finding the area under the curve); one particular content area that needs greater emphasis. The question related to finding the area under a curve was done well, probably because of the clear direction they were given.

Questions on number sequences also continue to be done well.

Ratio, Proportion and Rates of change

There remain too many candidates who make it more difficult for themselves on a calculator paper by attempting partitioning methods when working out a percentage. Finding a percentage change or reverse percentage is still not well understood, though for most candidates working out percentages was frequently done well.

It is clear that centres have been spending more time on ratio and on relationships between numbers, since performance on questions involving these has increased slightly, but still remains a general weakness. Proportion questions are sometimes mis-read, resulted in a relationship being inverted. Division by a ratio is now usually well done, but the demands become too great when two or more ratios are linked in a question. Writing numbers in ratio form is usually well done, though some fail to simplify their ratios, even when asked to do so.

Compound interest is well understood, but those who use multipliers need to take greater care (avoid $1.4\% = 1.14$). The language of proportion needs greater emphasis. In one question a significant number of candidates were confused as to whether the process of solution involved direct or inverse proportion.

Geometry and Measures

Candidates' recall of essential formulae remains a weakness for some, in particular those for the area of a triangle, area of trapezium, and those related to circular shapes or solids. Use of technical terms remains a weakness, for example in giving geometrical reasons or in describing a transformation, where non-standard terminology cannot be accepted. Performing transformations was done well, better than previously, including enlargement with a fractional scale factor.

General weaknesses still persist in handling and converting units. Candidates need to remember there is usually one question in which they have to state the units.

Otherwise mensuration work in problem solving appears to show little improvement; the main issue is that candidates do not always read the question fully, and therefore leave out essentially parts of the process to finding a complete solution.

Work involving 3-D has proved problematic in the past. Whilst drawing an accurate front elevation from a 3-D diagram showed that 3-D work is accessible at a simple level, this was not the case with a later question involving Pythagoras and trigonometry, irrespective of the fact that they demonstrated the ability to carry out calculations involving Pythagoras and trigonometry in 2-D based questions. Work involving Sine and Cosine rule were usually well attempted.

Finding the sum of the interior angles of a polygon continues to be a weakness, with many just assuming it is always 360° irrespective of the shape.

There seems to be better understanding of vectors, with far more candidates gaining marks in this area, but this is not the case when working with diagrammatical representations of vectors. Centres need to focus on the full range of vector applications.

Similarities between lengths area and volumes was a weakness. Reasoning skills in geometrical contexts remain weak; this includes formal proof, such as that needed for congruent triangles.

Probability and Statistics

Understanding scatter diagrams remains a strength, and box plots were also well understood, but histograms continue to be a weakness.

Probability appears to be well understood, with most candidates successfully dealing with repeated probability or within the context of non-replacement. The exception is when these arise from an unstructured problem. Completing and using tree diagrams is a particular strength.

Other qualifications.

The following information is presented purely as information to centres, and to offer some different opportunities that centres may not be aware of.

Entry Level Certificate (ELC) in Mathematics.

The ELC offers an opportunity for lower ability candidates to qualify at level 1, 2 or 3. The assessment is based on written tests and a task which can be taken in-house whenever the candidate is ready. The ELC has been re-written to complement the GCSE (9-1) Mathematics qualification with a degree of overlap at the lowest levels, both in content and in assessment style, which in Summer 2018 attracted a much larger entry than previously, such was the interest shown. The ELC offers a different opportunity which enables student to gain a qualification in Mathematics. It also has the advantage that students can be dual-entered for both GCSE and ELC Mathematics, the latter taken before the GCSE exams. This reformed qualification is entirely appropriate for lower ability candidates. When the centre wishes to claim the certificate, the work is sent to a moderator who can then verify the award, at level 1, 2 or 3. The Summer 2018 moderation process resulted in most candidates gaining the level requested. Centres received an individualised report. Marking of the tests was accurate; some centres need to follow the mark scheme for the tasks more closely. The greatest problem was when centres failed to follow the administrative instructions for getting the work moderated; additional guidance will be provided for next year, but the co-operation of centres in this matter is requested.

<http://qualifications.pearson.com/en/qualifications/edexcel-entry-level-certificate/mathematics-2017.html>

GCSE Statistics

Many centres feel GCSE Statistics is an appropriate opportunity as an additional qualification. This year the bulk of the entry came from Year 9 or Year 10 students, but it could equally be taken in year 11 after the GCSE Mathematics exams. The reformed GCSE (9-1) Statistics qualification will be introduced from Summer 2019, the main difference being the move away from controlled assessment to assessment purely by examination. We have already published an accredited specification and specimen papers for this new qualification, mock papers and course support. Details of the new GCSE Statistics qualification can be found below.

GCSE (9-1) Statistics for Summer 2019 onwards:

<http://qualifications.pearson.com/en/qualifications/edexcel-gcses/statistics-2017.html>

Edexcel Awards

This suite of qualifications offers additional opportunities for a skills-based award. Offered at different levels and across three sets of content, students find them useful in preparing for GCSE, or even for other post-16 qualifications. The Number & Measure awards are also used in vocational areas, to support the continued study of mathematics. Students take the awards qualifications in Year 9, 10 and 11, and as a post-16 qualification. In making an entry centres make a choice of subject dependent on content; depending on the subject the qualifications are offered at a variety of ability levels. Details may be found below.

<http://qualifications.pearson.com/en/qualifications/edexcel-awards-in-mathematics/number-and-measure.html>

<http://qualifications.pearson.com/en/qualifications/edexcel-awards-in-mathematics/algebra.html>

<http://qualifications.pearson.com/en/qualifications/edexcel-awards-in-mathematics/statistical-methods.html>

Support for teachers

Details about training courses for all our Mathematics qualifications can be found at:

<http://qualifications.pearson.com/en/support/training-from-pearson-uk.html>

And teachers will find further support and documentation on our emporium site at www.mathsemporium.com

Concluding remarks

We continue to be the leading examination board for Mathematics qualifications, with more centres using our assessments than any other examination board. With this comes a responsibility to continue to work with all these centres in future development. To those ends we are always interested in listening to their views.

Alongside the individual paper reports I hope centres find this summary report useful. We offer such reports, and our support meetings in order that teachers can feel confident in preparing further cohorts for qualification. Support we feel is unrivalled.

It is clear that many centres are now feeling confident in using our GCSE (9-1) Mathematics qualification, but nevertheless their desire is always to continue

making progress in enhancing results over time. Here at Pearson we will continue to offer guidance to support those aims.