Examiners' Report
Principal Examiner Feedback

Summer 2019

Pearson Edexcel iPrimary Curriculum
Mathematics Year 6
(JMA11)

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Principal Examiner's Report on paper JMA11 Summer 2019

This summer saw yet another successfully sitting of this level paper; this time following the new specification. Candidates were able to access the majority of the questions well. The new achievement test has more questions where method marks are possible and centres must continue to encourage their candidates to show working (and leave it on the script, not erase it) in order for these marks to be allocated. It is becoming more apparent that centres are encouraging candidates to show their working in the space provided on the examination paper, thus allowing for the award of method marks where possible.

Section A, as always, was a 20 question multiple choice section, each question worth 1 mark. Candidates continued to do well on this section, with most scoring 50% or higher. This new specification paper had more straight forward and accessible questions in this section with candidates scoring well throughout.

Section B is made up of one and two mark questions; the final question being a 3 mark problem solving question. Candidates who show their working are able to pick up more marks for their method. Candidates who do not show working sometimes miss out on awardable marks following arithmetic errors, as these could not be seen and worked through. As with the iGCSE it will become more common to see marks only awarded on some questions if working is seen.

Question 21: The vast majority of candidates gained credit here for being able to complete a symmetrical pattern.

Question 22: Part (a) was very well answered with almost all candidates being able to read the scale. Surprisingly fewer candidates were awarded this mark, which was for conversion. Almost all doubled their answer to (a); many stopped there making no attempt to change the units. It is essential that the candidates look carefully at the units required for the answer; in this case they were asked in the question to provide their answer in grams.

Question 23: A well answered question with most being able to correctly join the fractions and decimals. Where candidates missed out on both marks, most managed to score 1 mark by joining at least two correctly – usually 0.3 and 0.75

Question 24: Most candidates were able to find $\frac{1}{6}$ of 180 successfully. Fewer, but still the majority, also managed $\frac{5}{8}$ of 320; with those not scoring two marks being able to score one for a fully correct method or a correct first calculation seen (ie 40 or 1600).

Question 25: Many candidates demonstrated the skill of being able to read a timetable proficiently.

Question 26: A good number of correct answers seen. Many of those who were incorrect had little idea of a sensible approach, with a great deal of trial and improvement seen (which gained no marks unless the correct answers are

obtained). Many attempted to divide the total amount by 5 and by 4, not recognising that the given amount was the total, so division by 9 was the necessary first step.

Question 27: (a) only 50% of candidates were able to correctly use parallel notation, with many of those unable to using notation to indicate lines of equal length. Other candidates knew to use arrows but put them on all lines.
(b) The majority of candidates were able to name the triangle correctly as an isosceles triangle (poor spelling was condoned)
(c) Many candidates were able to correctly identify this line as the diameter, many though chose semi-circle, symmetrical and occasionally radius.
(d) It was pleasing to see the majority of candidates being able to use either 360° around a point or 180° on a straight line to work out the value of the missing angle.

Question 28: Part (a), multiplying fractions, was very well answered by most; and answered much better than part (b). Candidates who succeeded here began by writing the 4 as $\frac{4}{1}$; however many still did not understand to 'flip' the second fraction before multiplying and gave $\frac{8}{3}$ rather than $\frac{2}{12}$ as their answer.

Question 29: Here candidates needed to find the median and range of a set of data. This question was answered well with over two thirds of candidates scoring on both parts.

Question 30: Some very well constructed pie charts seen in response to this question. It was noticeable that very few did any form of calculating of angles clearly seeing the connection of 180, 90 ,60 and 30. There were also some very poor attempts showing little understanding that the data given should fill the circle completely.

Question 31: Part (a) The majority of candidates used a traditional method for long multiplication with lots of accurate answers seen. When errors did occur it was usually down to arithmetic mistakes rather than place value errors. There were a few responses where no working was seen but a fully correct answer was on the answer line. Centres must make it clear that if a questions states 'You must show your working' students will be penalised if they don't.
Part (b) Again, most students chose a traditional long division approach; although many accurate responses were seen, it was not as well answered as the long multiplication question. When an error occurred it was usually the student bought down both the 1 and 5 together, showing a misunderstanding of the process trying to be carried out.

Question 32: Part (a) Only around half of the candidates were able to correctly expand the single bracket, a question which is very common on this paper (both in the pilot new specification and on the legacy paper)
Part (b) Some candidates were able to expand the brackets, but many of these were unable to simplify the terms correctly, with 14a - 3b a very common incorrect answer; however a single mark was awarded for the correct expansion of either of the brackets. Others were unclear what was to be multiplied, and a few thought they should add rather than multiply.

Part (c) A good proportion of the candidates knew how to solve a simple equation, which was pleasing.

Question 33: Part (a) the vast majority of candidates managed to correctly plot the given point on the coordinate grid. Part (b) However, few were able to successfully complete the rectangle.

Question 34: Part (a) The most common score here was 1 mark for listing at least 4 factors with no more than 1 incorrect. Surprisingly few found all of the factors of 54, usually forgetting 18. A number of candidates had 7 and 8 listed which scored them no marks as they were only allowed one incorrect answer.
Part (b) Around half of the candidates were able to find the highest common factor of 54 and 12, which was very pleasing.
Part (c) however caused problems with the use of prime factors. The majority of candidates had no idea but those who knew what to do and scores full marks.

Question 35: This 3 mark question proved difficult for many students who had little idea of how to tackle this type of problem. A common wrong method was to use area, 50 x 50 was a common start but led them nowhere. Students who managed to work out an answer of either 70 or 75 often lost the last mark because they failed to give the full dimensions of the stone. A lot of blank responses were seen when students had no idea of where to begin or what to do.

General:

- It was very pleasing to see many more candidates showing their working on the paper, in pen, and not working out in pencil then erasing their working.
- **Using a pie chart -** was a new approach to presenting data; as pie charts tend to be used for interpreting data and bar charts for presenting – centres need to be aware that candidates might be asked to display and present data in a variety of ways.
- **Plotting coordinates to complete shapes –** centres need to remind candidates that the shapes might be tilted and not just run along the 'grid lines'