

# Examiners' Report

Summer 2015

Pearson Edexcel PLSC in Mathematics Year 6 (JMA01/01)



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#### **PLSC Mathematics Year 6**

#### Specification JMA01/01

#### **General Report**

This summer saw another successful sitting of the Primary and Lower Secondary Curriculum examinations. This junior paper JMA01 saw another increase in cohort and a wide range of scores across the board. Even though some centres are beginning to insist that students show their working in answering questions, still most are not doing this.

## **Report on Section A**

Section A, as always, was a 20 question multiple choice section, each question worth one mark. The students, on the whole, did well on this section, with numerous scoring over half marks and many scoring close to full marks. Students appeared to present their answers more clearly by putting a cross in the necessary box. Far less students were circling their answers, identifying it in the question or crossing more than one box. This helped with the smooth marking of the questions and would allow for less error when this section becomes computer marked.

## **Report on Section B**

Section B required students to use the work space provided to answer each question, with questions being worth one or two marks. As with previous years, students seemed reluctant to use the work space provided or even to show working at all. In some instances, students were seen to have worked out in pencil and erased the working, leaving just their answer. Other students used the inside back cover for working out or, on occasion, extra paper. Students must be encouraged, if not instructed, to show their working out on the examination paper, this will prove to be good practice as they move towards the iGCSE examinations, which require full working to be shown to be awarded marks for some questions. Students who did not show working could not be awarded any method marks for calculation errors, as they 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 required the students to complete a right-angled triangle by adding two lines to the line given on a grid. On the whole this was a well answered question with a variety of correct responses given.

Question 22 required the students to read the number *six hundred and six*, given in words, and write it in figures. This again was well answered on the whole with a number of students getting the answer incorrect, maybe by misunderstanding the word *"figures"*.

Question 23 asked for *all* factors of 24. Many students did not score full marks on this question. Common errors were to miss a single factor. However students usually managed to find 6 or 7 factors and very few wrote down wrong ones, therefore scoring 1 mark.

Question 24 involved the students handling data and using a simple key. Students who did not score on this question appeared to not use the key, commonly offering 4 ½ for Wednesday. More students got part (ii) incorrect. Students must look carefully to see if there is a key offered before working out their totals.

Question 25 was a poorly answered question assessing equivalent fractions. Students struggled to produce equivalent fractions even when given either the numerator or denominator. Part (b) tended to be better answered with more students being awarded at least one mark. There were many students who did not attempt to answer this question.

Question 26 was a very simple perimeter of a square grid. This question was very poorly answered with the area often being given instead of perimeter.

Question 27 involved the students identifying angles and joining them to the correct name. This was a well answered question.

Question 28 was a question in which students struggled with ordering decimal numbers this summer. Students were able to pick up one mark here if one mistake could be removed leaving their other responses correctly ordered. The higher level students tended to gain both marks here.

Question 29 a common error on this question was for students to find 1/3 of 30 (=10) for strawberry, then subtract that from the initial 30; they then found 20% of 20 (rather than 30). Students were able to gain one mark for part working on this question.

Question 30 on the whole was answered well. Students who did not score here commonly only circled two numbers or regularly gave 90 or 72 as one of their choices.

Question 31 was an extremely poorly answered question. Students offered a great deal of working out but rarely reaching the correct answer. They appeared to struggle with converting into comparable units.

Question 32 was very well answered. The majority of students chose to use long division to answer the question, reaching the correct answer, or showing enough working to gain one mark even if an error was made in their working. Some students chose to write the correct answer with no written working at all – in future this may well be a question requiring working to score marks and students need to be encouraged to show working so as not to be penalised.

Question 33 was not a well answered question, students often chose even or likely.

Question 34 saw most students scoring one mark. Usually the mode was answered correctly with the range proving more difficult, maybe because the numbers were not given in numerical order. Again, students need to be encouraged to write on their examination papers to aid in their working out.

Question 35 showed how the different level students score differently. Students who were more able scored both marks, middle scoring students tended to score one mark for the second number (65), with weaker student's scoring nothing.

Question 36 required the simplification of algebraic expressions. This question discriminated well between students. Many students scored in part (i) but could not work with the + and – in part (ii). Stronger students tended to score on both parts. Students again need to be encouraged to show working and methods, as in future years the questions could be scored differently and marks offered for working seen.

Question 37 was testing students rounding skills. It showed many students had a problem with rounding numbers to whole numbers or one decimal place. Part (i) regularly saw 5.0 offered as the correct answer, and students were not penalised for this in part (i). They were however penalised for offering 6.20 in part (ii). A much more common incorrect response to part (ii) was 61.8; students moving the decimal point rather than rounding. Question 38 saw many students scoring one mark for reaching 65°, but many went no further to actually work out the correct angle. The more able students could work this out with minimal working seen.

Question 39 saw very few students scoring any marks. Many got the coordinates for part (i) in the wrong order scoring 0. More often than not, part (ii) was not even attempted.

Question 40, on the whole, only scored marks for the high level students.

Part (a) was poorly answered with clear misunderstanding of subtracting fractions. Some more able students completed it successfully, but very few.

Part (b)(i) was attempted by many students however either misread or misunderstood with many giving the fraction of pencils handed out, rather than how many left.

In part (b) (ii) the correct answer was often seen even if (i) was incorrect. Students had the chance here to gain this mark as a follow through if they had correctly calculated from 'their' answer in (i).

Question 41 was answered successfully by most students who filled in the table in part (i). Unfortunately, even though the majority of students attempted to fill in the table this was not always successfully. Students either partially completed or incorrectly completed the table. More care needs to be taken with such a question in future.

Part (ii) tended to score for students who successfully completed the table.

Part (iii) was less successful, some students appeared to misunderstand the 'equally likely to occur as 5' and chose to give an answer for 'how to make 5' - regularly seeing 2 and 3 offered as their final answer.

Question 42 saw a lot of correct answers. Working was often rubbed out or on the back pages. Even if an incorrect answer was given student frequently scored one mark for their working, as long as they followed a complete and correct method. This is another example of students being required to show their working in order to achieve marks.

#### Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

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