## *Results of Primary 3 Mathematics in TSA 2015*

The Territory-wide percentage of P.3 students achieving Mathematics Basic Competency in TSA 2015 was 87.6%. The proportion achieving basic competency in 2015 was almost the same as that in 2013 and 2014.

## *Primary 3 Assessment Design*

The assessment tasks for P.3 were based on the Basic Competency at the end of KS1 for the Mathematics Curriculum (Trial Version) and the Mathematics Curriculum Guide (P1 – P6), 2000. The tasks covered the four Dimensions of the Mathematics Primary 1 to 3 curriculum, i.e. Number, Measures, Shape & Space and Data Handling, and tested the concepts, knowledge, skills and applications relevant to these dimensions.

The Assessment included items in a number of formats based on the context of the question, including fill in the blanks, answers only and answers involving working steps as well as multiple choice. Some of the test items consisted of sub-items. Besides finding the correct answers, students were also tested on the ability to present their solutions to problems, including writing out necessary statements, mathematical expressions and explanations.

The Assessment consisted of 119 test items (186 score points) covering all the 49 Basic Competency Descriptors of the four Dimensions. These items were grouped into four sub-papers, each 40 minutes in duration and covered all four Dimensions. Some items appeared in more than one sub-paper to act as inter-paper links. Each student was required to attempt only one of the four sub-papers. The number of items in the various sub-papers is summarized in Table 8.1. These numbers include overlapping items that appear in more than one sub-paper to enable the equating of test scores.

**Table 8.1 Number of Items and Score Points for P.3**

| Subject | No. of Items (Score Points) | | | | |
|---|---|---|---|---|---|
| | Paper 1 | Paper 2 | Paper 3 | Paper 4 | Total* |
| **Mathematics** | | | | | |
| Written Paper | | | | | |
| Number | 19(24) | 19(25) | 20(26) | 19(25) | 57(78) |
| Measures | 10(17) | 10(17) | 8(13) | 9(14) | 30(49) |
| Shape and Space | 8(13) | 8(10) | 7(13) | 7(12) | 26(41) |
| Data Handling | 2(6) | 2(6) | 2(6) | 2(6) | 6(18) |
| Total | 39(60) | 39(58) | 37(58) | 37(57) | 119(186) |

* Items that appear in different sub-papers are counted once only.

# *Performance of P.3 Students with Minimally Acceptable Levels of Basic Competence in TSA 2015*

## P.3 Number Dimension

Students' performance in this dimension was satisfactory. Students performed well in addition, subtraction, multiplication and division of whole numbers as well as in their mixed operations. In general, students were able to solve application problems and demonstrate working steps clearly in presenting their solutions. They could understand the basic concepts of fractions and compare fractions. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

***Understanding basic concepts of numbers and fractions***

- Students did well in recognizing the place values of digits in a whole number and the values represented by the digits (e.g. Q1/M1, Q1/M3, Q1/M4). The majority of students could read, write and order numbers up to 5 digits (e.g. Q3/M1, Q2/M4) as well as expressing Arabic numbers in correct Chinese characters or English words (e.g. Q2/M3). However, almost half of the students could not select digits to form whole numbers satisfying specific criteria (e.g. Q3/M3).

| Q3/M3 |
| --- |
|  |



- The majority of students were capable of using fractions to represent parts of a whole (e.g. Q17/M1, Q18(a)/M1, Q16/M4, Q17/M4). However, in Q18(b)/M1 and Q16(b)/M2, half of the students might have been careless or did not understand the question and gave the wrong answer.
- In Q17/M2, a few students missed the words 'less than' in the stem and carelessly chose the options A or B. Some others wrongly chose the option D.
- Most students could recognize the relationship between fractions and 1 as the whole (e.g. Q18(a)/M2). Many students were able to compare $\frac{1}{1}$ and $\frac{2}{2}$ (e.g. Q18(a)/M4).

- Most students were able to compare fractions with the same numerators or with the same denominators (e.g. Q19/M1, Q19/M2, Q19/M4).
- The majority of students were able to give fractions satisfying specific criteria, i.e. one greater than the others (e.g.Q18(b)/M2, Q18(b)/M4).

***Performing basic calculations with whole numbers***

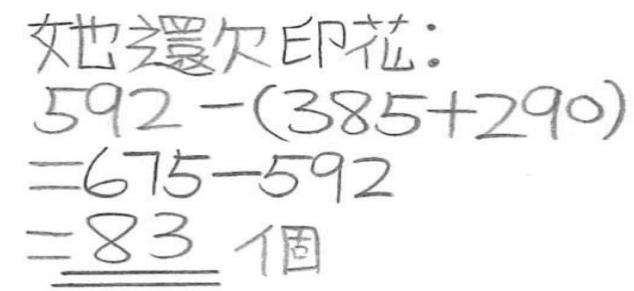
- Addition – Most students performed well at adding whole numbers (e.g. Q4/M1). They were also capable of performing repeated addition of 3-digit numbers including carrying (e.g. Q4/M3, Q3/M4).
- Subtraction – Most students were able to perform subtraction of 3-digit numbers, involving decomposition and repeated subtraction (e.g. Q5/M1, Q6/M1, Q5/M3, Q4/M4).
- Multiplication – Most students were good at performing multiplication of whole numbers up to 1 digit by 3 digits involving carrying (e.g. Q7/M1, Q6/M3, Q5/M4) and repeated multiplication (e.g. Q6/M4).
- Division – The majority of students were capable of dividing with a divisor of 1 digit and a dividend of 3 digits (e.g. Q8/M1, Q9/M1, Q7/M3). In Q7/M4, a few students failed to put a zero in the quotient and chose option B.
- Mixed operations – The majority of students could perform mixed operations of addition and subtraction (e.g. Q10/M1). In Q8/M4, some students mixed up the 'minuend' with the 'subtrahend' and chose option B. Students could handle mixed operations of multiplication and addition/subtraction (e.g. Q9/M4). But in Q8/M3, a few students were not aware of the computational rule of doing 'multiplication/division before addition/subtraction' and chose option D.

***Solving application problems***

- The majority of students in general were capable of solving simple application problems involving addition, subtraction, multiplication, division and mixed operations (e.g. Q11/M1, Q13/M1, Q15/M1, Q16/M1, Q12/M2, Q9/M3, Q11/M3, Q12/M3, Q14/M3, Q12/M4, Q13/M4, Q15/M4). In problems with more complicated contexts, students misunderstood the given conditions due to carelessness in reading the questions (e.g. Q12/M1, Q13/M2, Q14/M2, Q13/M3).

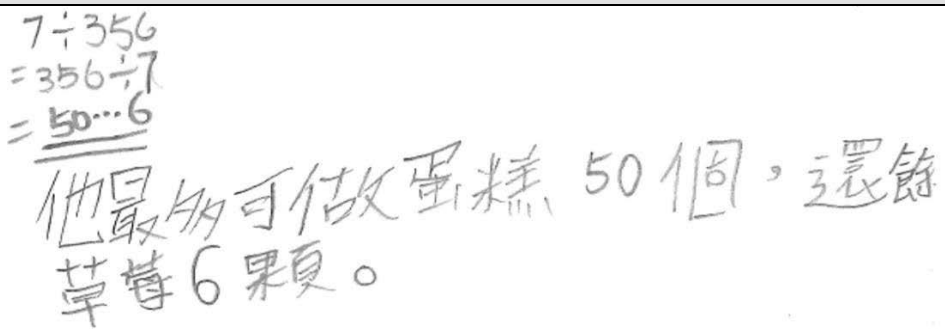
- A very small proportion of students mixed up the 'minuend' with the 'subtrahend' when solving simple problems involving subtraction, though they still got the correct answers (see the example of student's work).

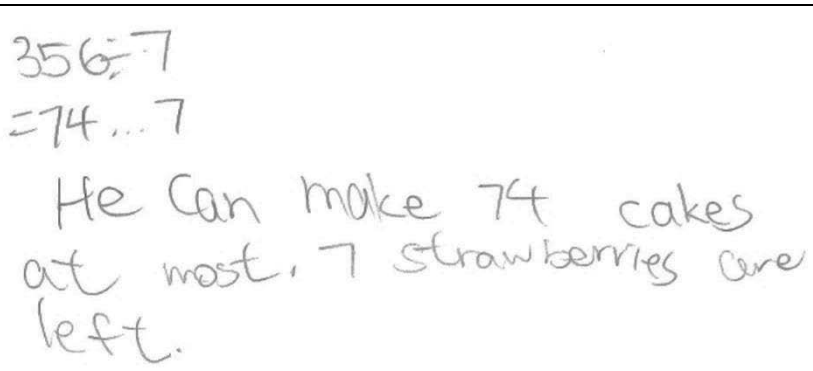
Q15/M4




- A very small proportion of students confused the 'dividend' with the 'divisor' or did their calculations carelessly (see the examples of students' work).

Q12/M3

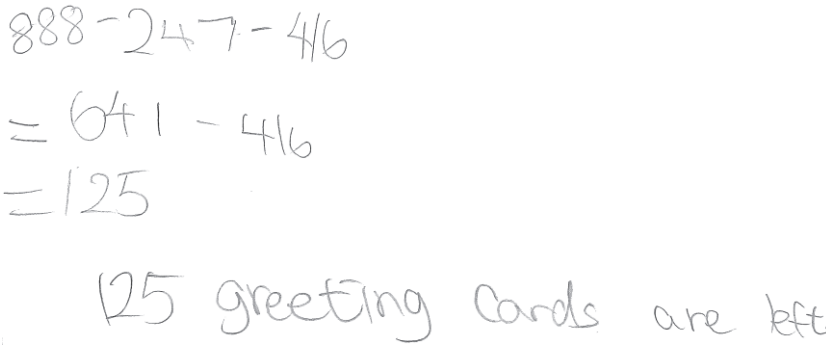



- Students were capable of showing the solutions with correct working steps in solving application problems. However, some students were not able to deduce or explain their answers logically (see the examples of students' work).

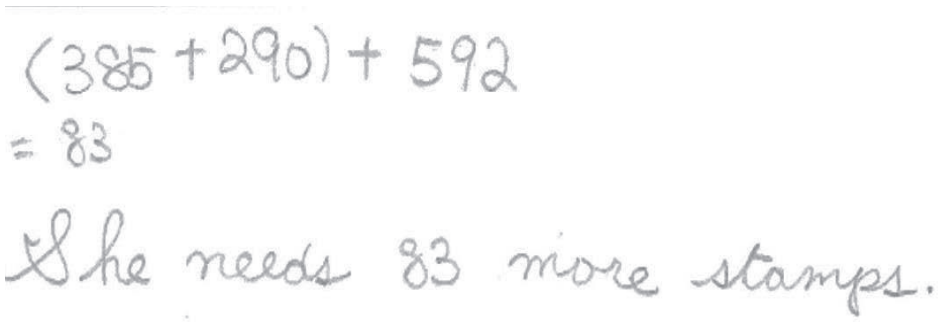
(a) Some students made computational errors.

Q14/M3



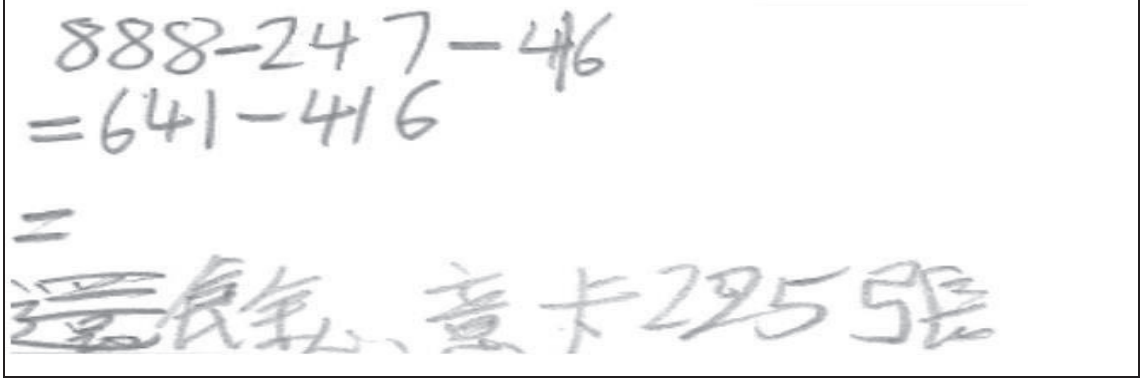

(b) Some students gave incorrect mathematical expressions.

Q15/M4




(c) Some students showed incomplete working steps.

Q14/M3




- The majority of students were able to solve problems involving addition, subtraction and multiplication in the calculation of money (e.g. Q14/M1, Q14/M4). In Q15/M2, a few students misunderstood the price tag or were careless in reading the questions. They put 2 dollars and 60 cents as the answer.

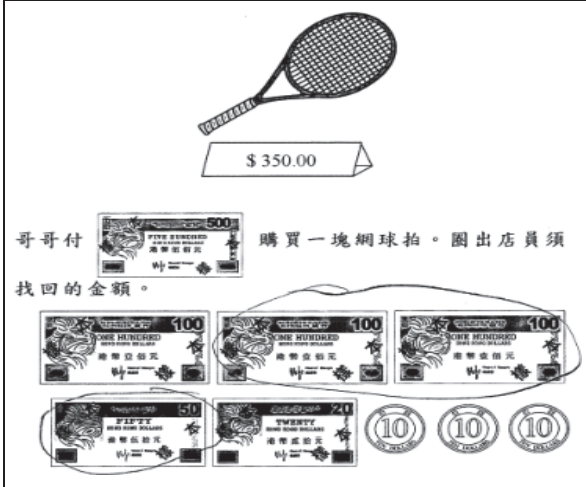
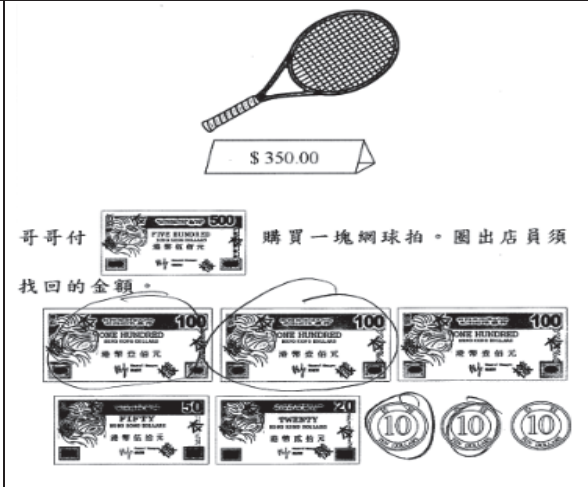
## P.3 Measures Dimension

The students performed well in this Dimension. Most students could identify and use Hong Kong money, read price tags, directly compare the length, weight and capacity of objects; choose the appropriate units for measuring and recording the length of objects. Students in general were capable of telling the dates and days of the week, telling time from a clock face and a digital clock.

A small number of students were not capable of using appropriate units to measure and compare the capacity of containers. A few students could not find the duration of activities. Further comments on students' performance are provided with examples from different sub-papers quoted in brackets as follows.

***Hong Kong money***

- The majority of students in general could identity and use Hong Kong money (e.g. Q20(a)/M1, Q20(b)/M2). Most students could read the price tags well (e.g. Q22/M1).
- Students performed well in exchanging money directly (e.g. Q21(a),(b)/M1), and they showed progress when they were required to do simple calculations before exchanging money (e.g. Q21/M4). But for a few students, there was still room for improvement.

| Q21/M4 | Q21/M4 |
|---|---|
|  |  |

***Knowledge of time***

- Most students were capable of telling the dates and days of a week from a calendar (e.g. Q25/M1). However, in Q23(b)/M2, given the start date and end date of the Easter holiday, some of them were unable to find the duration of the holiday. Some students, possibly, might not have counted the first day of the holiday.

Q23(b)/M2

根據下面四月份的月曆，回答下列各題。

| 四月 | | | | | | |
|---|---|---|---|---|---|---|
| 星期日 | 星期一 | 星期二 | 星期三 | 星期四 | 星期五 | 星期六 |
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | | | |

(b) 四月八日至四月十七日是學校復活節假期，這個假期共有 9 天。

- For a date not included in the calendar, a small number of students could not find the day of a week of that specified date. (e.g. Q23(c)/M2).

Q23(c)/M2

(c) 五月三日是星期 4 。

- Almost all students were capable at telling time from a clock face/digital clock including the 24-hour system (e.g. Q26(a), (b)/M1). Given both the start and the end time on clock faces (e.g. Q26(c)/M1), or on digital clock faces, the majority of students were able to record the duration of time for activities which involved calculation. However, if the start and end times were shown on clock face and digital clock respectively, quite a number of students could not work out the duration of time (e.g. Q24(b)/M2).

Q24(b)/M2

消防員出發時間

(b) 消防員在 1:55:45 PM 到達現場，
他們用了 5 分鐘 45 秒。

Q24(b)/M2

(b) 消防員在 1:55:45 PM 到達現場，
他們用了 4 分鐘 85 秒。

- Almost all students were able to recognize the 24-hour time (e.g. Q21(a)/M3), but some students failed to convert the 24-hour time to the time in the afternoon (e.g. Q25(a)/M2).

Q25(a)/M2

| 開始時間 | 完結時間 | 活動 |
|---|---|---|
| 10：30 | 11：25 | 細說名人 |
| 11：30 | 12：35 | 摺紙天地 |
| 12：40 | 13：55 | 棋逢敵手 |
| 14：00 | 15：25 | 合唱團 |
| 15：30 | 16：55 | 有趣科學園 |

「合唱團」的完結時間是

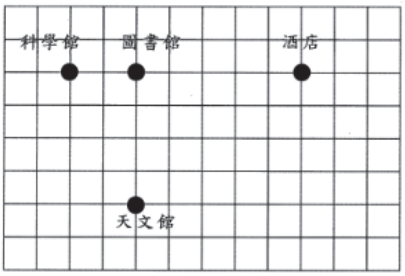
* 上午 / (下午) 15 時 25 分。

(*圈出答案)

***Length, distance, weight and capacity***

- Almost all students could compare the lengths of objects and the distances between objects directly (e.g. Q25/M3), though some of them had difficulties in comparisons using improvised units, such as squared paper (e.g. Q20/M4).

Q20/M4




根據方格紙上的地圖，距離圖書館最遠的是

* 科學館 / (天文館) / 酒店 。(*圈出答案)

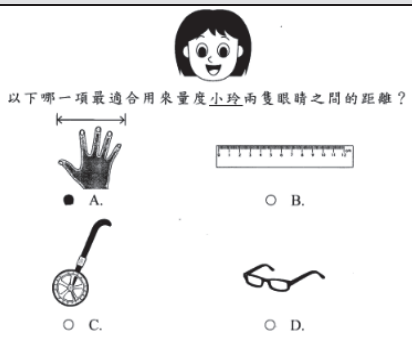
Q20/M4

根據方格紙上的地圖，距離圖書館最遠的是

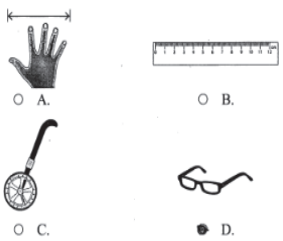
* (科學館) / 天文館 / 酒店 。(*圈出答案)

- Most students were capable of expressing and comparing the distance between objects using ‘kilometre’ (km) (e.g. Q22(a),(b)/M3), to measure the distance between objects with ‘ever-ready rulers’, such as arm length (e.g. Q22/M2). However, some students were unable to measure the distance between two eyes with appropriate measuring tools (e.g. Q23/M3).

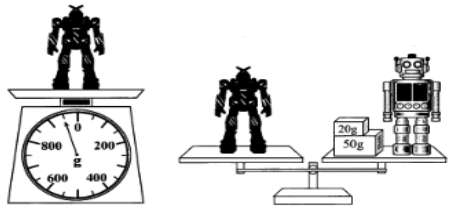
Q23/M3



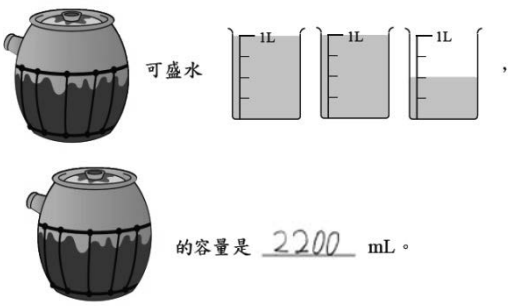

Q23/M3



- The majority of students could record the length of an object with an appropriate unit (e.g. Q24(1),(2)/M1, Q21(1)/M2, Q27(1)/M3), and use ‘centimetre” and ‘kilometre’ to express the distance (e.g. Q22(1)/M4).
- The performance of students in measuring weight was better than that of measuring length. Almost all students did well in choosing the appropriate tools to measure the weight (e.g. Q26/M3). The majority of students were able to measure and compare the weight using improvised units (e.g. Q27/M1) and record their answer with appropriate single units (e.g. Q21(2)/M2 and Q27(2)/M3). Many students could measure the weight of objects using ‘gram’ (g) or kilogram’ (kg) (e.g. Q23/M1, Q28(a)/M2 ), But in Q28(b)/M2, nearly half of the students could not compare the weight of two toys or made careless mistakes.

| Q28(b)/M2 | Q28(b)/M2 |
|---|---|
|  <br>(a) 的重量是 950g （答案須寫上單位）。<br>(b) 比 *(輕)/重 880 g。<br>（*圈出答案） | (b) 比 *(輕)/重 300 g。<br>（*圈出答案） |

- Most students could directly compare the capacity of different containers (e.g. Q28/M1). The majority of students did well in measuring the capacity with improvised units (e.g. Q29/M1) and chose the appropriate measuring tools for measuring capacity (e.g. Q29/M2). Some students were not able to use ‘Litre’(L) or ‘millilitre’(mL) to measure and compare the capacity (e.g. Q28/M3).

| Q28/M3 | Q28/M3 |
|---|---|
|  <br>可盛水 ，<br>的容量是 2200 mL。 |  <br>的容量是 1500 mL。<br>的容量是 2?00 mL。 |

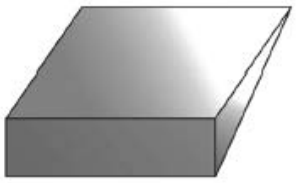
# P.3 Shape & Space Dimension

The performance of P.3 students was good in the Shape & Space Dimension. The majority of students were capable of identifying familiar 2-D and 3-D shapes. They were able to recognize straight lines, curves, parallel lines and perpendicular lines. They could handle problems involving right angles and the four directions. However, some students were weak in basic concepts, for instance, prisms and quadrilaterals. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

***3-D Shapes***

- The majority of students were capable of identifying 3-D shapes including prisms, cones and cylinders (e.g. Q30/M2, Q32/M2). A prism with triangular faces was easily mistaken to be a pyramid (e.g. Q30/M4).

Q30/M4

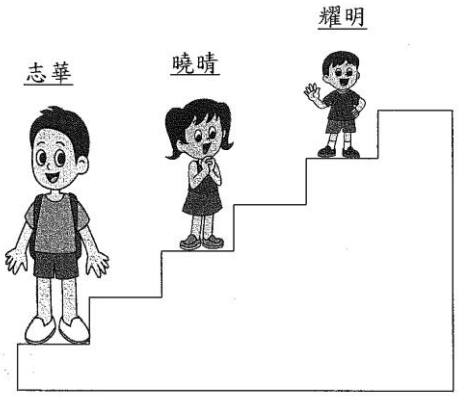


以上的立體圖形是一個

- A. 角錐。
- B. 角柱。
- C. 三角形。
- D. 長方形。

- Moreover, the inaccurate description used in our everyday life, e.g. a 'rectangular matchbox', might have confused quite a number of students and therefore they chose the option 'rectangle' in answering Q31/M1.
- Generally P.3 students were able to classify familiar objects in daily life according to their shapes (e.g. Q30/M1; Q33(a)/M2; Q30/M3). However, some students confused prisms/cylinders with pyramids/cones (e.g. Q33(b)/M2).
- Most students were able to compare heights intuitively (e.g. Q31/M2). Only a few students misunderstood the question (see an example of students' work as follows).

Q31/M2




觀察上圖，比較三位學生的身高。

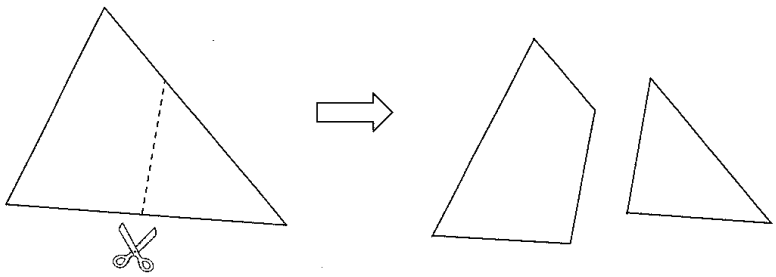
答案：* 志華 / 曉晴 / 耀明 最高。

（*圈出答案）

***2-D Shapes***

- The majority of students could identify 2-D shapes including trapeziums, rhombuses, rectangles, pentagons, circles and triangles (e.g. Q32/M1, Q37/M2, Q32/M3, Q31/M4). However, a small proportion of students had difficulties in deciding whether a shape was a quadrilateral or a trapezium (e.g. Q33/M1; Q35/M2; Q37/M2) (see examples of students' work on Q33/M1and Q37/M2 below).

Q33/M1



沿着虛線把上圖的三角形剪開後，可得一個三角形和一個

○ A. 平行四邊形。

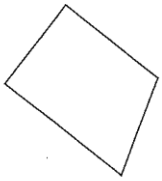
○ B. 五邊形。

○ C. 四邊形。

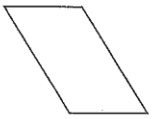
◉ D. 梯形。

Q37/M2

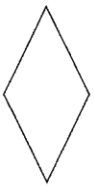
下面哪個平面圖形是梯形？



○ A.



○ B.

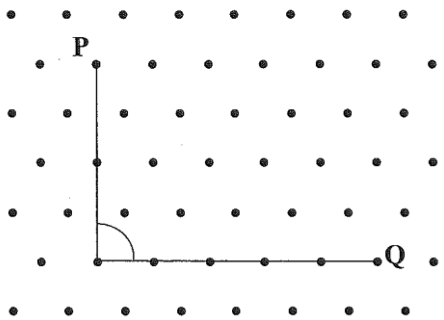


○ C.

● D.

- P.3 students could group 2-D shapes according to the number of sides (e.g. Q33/M4).
- The majority of students understood the characteristics of right-angled triangles (e.g. Q36(b)/M2, Q31/M3) (see an example of students' work on Q36(b)/M2 below).

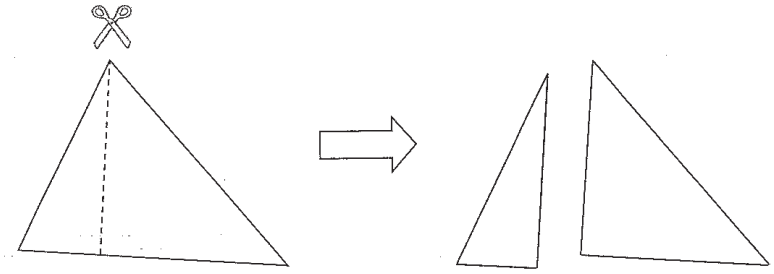
Q36(b)/M2




用直線把 P 點和 Q 點連起來，可形成一個
* 直角 / 等腰 / 等邊 三角形。
(*圈出答案)

- Some students confused isosceles triangles with right-angled triangles (see an example of students' work on Q31/M3 as follows).

Q31/M3



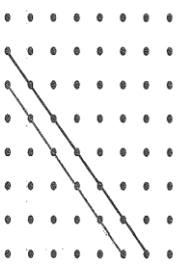
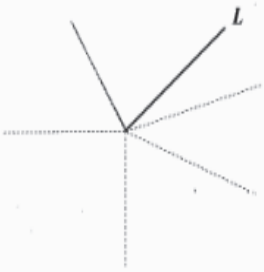
沿着虛線把上圖的三角形剪開後，可得

○ A. 一個等腰三角形和一個等邊三角形。
○ B. 一個等邊三角形和一個直角三角形。
○ C. 兩個等腰三角形。
◉ D. 兩個直角三角形。

- The majority of students could find the relative positions of two 2-D shapes (e.g. Q33/M3).

***Straight Lines and Curves***

- Most students were capable of identifying straight lines and curves (e.g. Q34/M3).
- The majority of students were able to draw parallel lines (e.g. Q34/M1; Q34/M2) and perpendicular lines (e.g. Q35/M1, Q32/M4).

| Q34/M1 | Q32/M4 |
|---|---|
| 下圖有一條直線，在圖上畫出一條與它平行的直線。  | 在下圖中，沿着虛線畫出一條直線，使它與直線 $L$ 垂直。   |

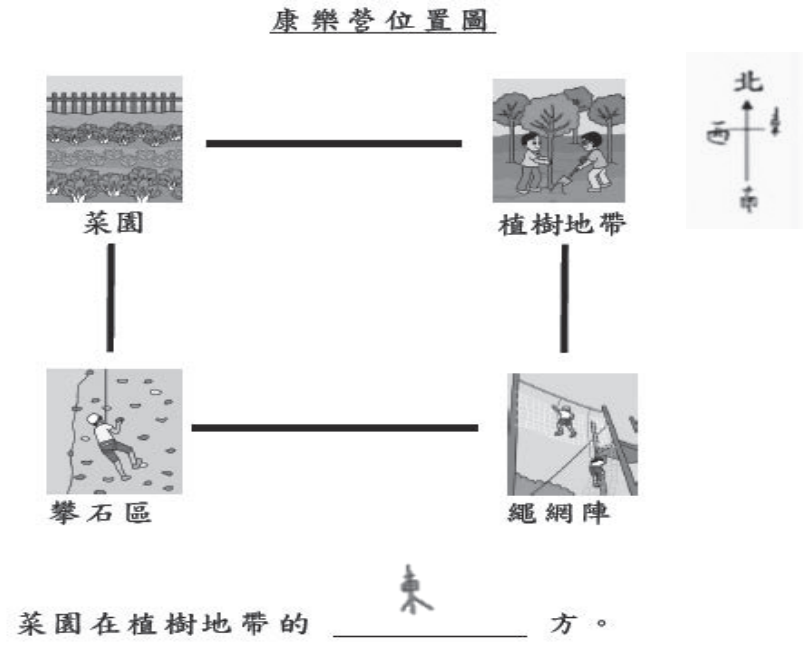
***Angles***

- Most students were able to recognize a right angle in a given figure (e.g. Q36/M1) and compare the size of angles (e.g. Q36(a)/M2).

***Directions***

- Most students were able to recognize the four main directions, namely, north, east, south and west (e.g. Q37(b)&(c)/M1, Q35(b)/M3). However, some students could not find the correct position relative to the given reference point (e.g. Q37(a)/M1, Q35(a)/M3) (see an example of students' work on Q35(a)/M3 below).

Q35(a)/M3




## P.3 Data Handling Dimension

Students performed well in this Dimension. They could read information from the data given in pictograms and interpret data to answer straightforward questions. They were also capable of constructing pictograms from tabulated data. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

***Reading and interpreting pictograms***

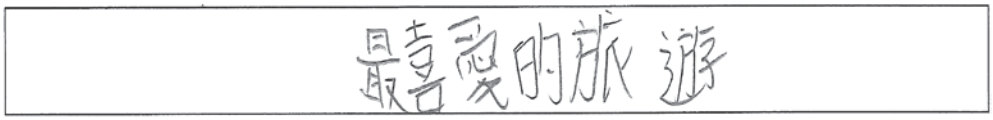
- Most students did well in directly interpreting the data from given pictograms (e.g. Q38(a)/M1, Q38(a)/M2, Q37(a)/M4), and carrying out simple calculations in order to answer questions (e.g. Q38(b)/M1; Q38(b)&(c)/M2; Q37(b)&(c)/M4).
- In answering open-ended questions, the majority of students were able to apply the actual data given in pictograms and give the correct inference and explanation (see the examples of students' work on Q38(c)/M1 as follows).

Q38(c)/M1


***Constructing pictograms***

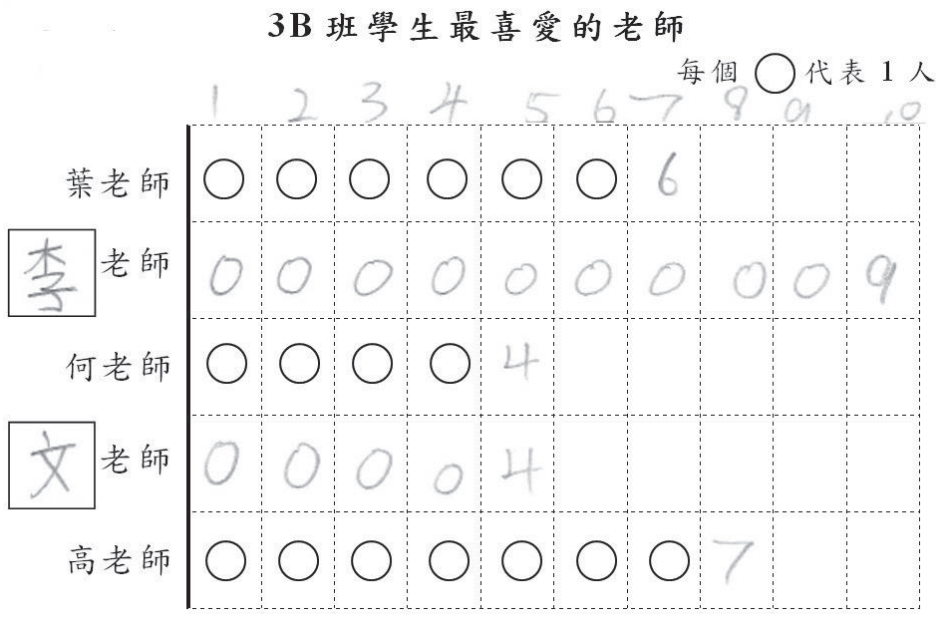
- The majority of students were capable of constructing pictograms from tabular data and providing a proper title for a pictogram (e.g. Q39/M1, Q39/M2, Q36/M3), though a few students could not use the appropriate keywords for the titles (see the examples of students' work).

Q36/M3




- A very small proportion of students unnecessarily added a 'frequency axis' to represent the data given by a pictogram whereas a few of them might have confused pictograms with bar charts (see the example of student's work on Q39(b)/M2 as follows).

Q39(b)/M2



## *General Comments on P.3 Student Performances*

P.3 students performed well in the Number Dimension. The majority of students demonstrated mastery of basic concepts and computational skills taught in Key Stage 1. They were able to solve simple application problems and correctly present proper working steps for their solutions. However, a few students still could not write their mathematical expressions correctly or give clear explanations or concluding statements, particularly in application problems with more complicated contexts.

In the Measures Dimension, the majority of students were able to get the basic concepts and apply the technique to solve problems. Most students could identify and use money, read the price tags properly, tell the time on a clock face or a digital clock. They could also compare directly the length, weight and capacity of objects and choose the appropriate units for measuring and recording the length. However, a few students were still weak when finding the duration of an activity. Some of them failed to use appropriate units to measure and compare the capacity of containers.

P.3 students performed well in the Shape & Space Dimension. The majority of students were able to recognize 2-D shapes, 3-D shapes, lines, curves, parallel lines and perpendicular lines. They understood the characteristics of right angles and the four directions. However, some students mixed up some basic concepts, such as cuboids and rectangles. They had difficulties in recognizing a trapezium (a pair of parallel opposite sides) and an isosceles triangle (two equal sides). A small number of students confused a cone with a circle (see an example of students' work on Q32/M2 below).

Q32/M2

以上的立體圖形是一個

◉ A. 圓形。
○ B. 圓柱。
○ C. 角柱。
○ D. 圓錐。

Students did very well in the Data Handling Dimension. They could read data from given pictograms with a one-to-one representation and construct pictograms from tabular data. Also, they could interpret the data given in pictograms and give reasonable explanations.

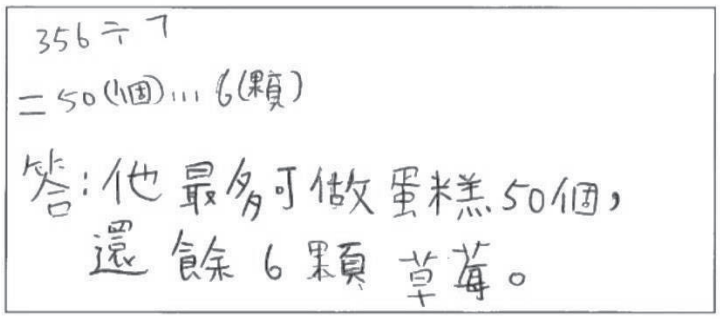
## *Best Performance of P.3 Students in TSA 2015*

Students sitting for each sub-paper were ranked according to their scores and the performances of approximately the top 10% were singled out for further analysis. The performances of these students are described below.

Among these students, a considerable number of students achieved a full score or lost at most one score point in the whole assessment. That is, they demonstrated a complete mastery of the concepts and skills being assessed by the sub-papers they attempted.

The best performing students were very good at arithmetic computations and could solve application problems in more complicated contexts. They were capable of presenting their solutions with clear working steps and explanation (see the examples of students' work). Most of them were able to solve problems in the division of money. These students also demonstrated sufficient understanding of the concept of fractions. They were capable of recognizing the relationship between fractions and the whole as well as comparing fractions.

Q12/M3

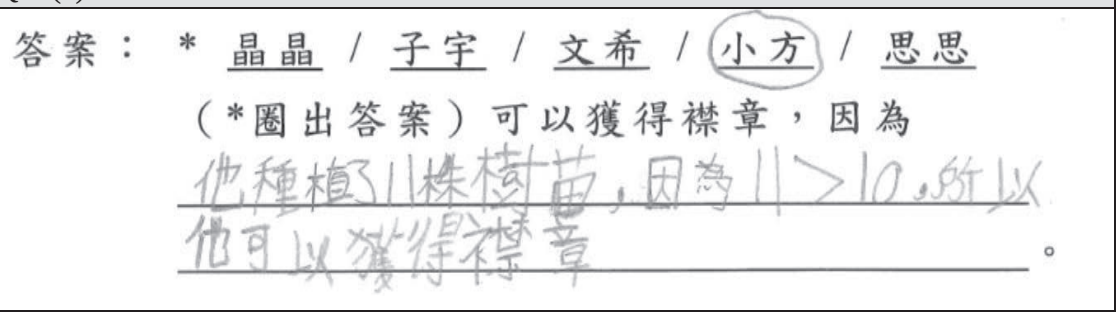



They could read the price tags and exchange money well. They could tell time from a clock face and digital clock, recognize and apply the '24-hour time' system and find the duration of an activity. For the lengths and the weights of objects, and the capacities of containers, they were able to directly compare, choose appropriate tools to measure and use suitable units to record.

The top students were capable of identifying 2-D and 3-D shapes, straight lines and curves, parallel lines and perpendicular lines, comparing the size of angles as well as recognizing right angles and the four main directions. Only a few students could not find the correct direction relative to a given reference point.

The best performing students were capable of constructing pictograms according to the supplied data. They could analyze data and extract relevant information from a pictogram to construct their reasoning (see the example of student's work).

Q38(c)/M1




## *Overview of Student Performances in Mathematics at Primary 3 TSA 2013-2015*

The percentages of students achieving Basic Competency in 2013, 2014 and 2015 are provided below.

**Table 8.2 Percentages of P.3 Students Achieving Mathematics Basic Competency in 2013-2015**

| Year | % of Students Achieving Mathematics Basic Competency |
|---|---|
| 2013 | 87.5 |
| 2014 | 87.4 |
| 2015 | 87.6 |

A comparison of the strengths and weaknesses of P.3 students in TSA 2013, 2014 and 2015 provides teachers with useful information on how to help students improve their learning. The table in the following pages provides a brief comparison of the students' performances in each of the four Dimensions for the last three years.

**Table 8.3 Overview of Student Performances in Mathematics at P.3 TSA 2013-2015**

| Year / Number | 2013 | 2014 | 2015 | Remarks |
|---|---|---|---|---|
| **Strengths** | • Students performed well in questions involving concepts of place values and mixed operations of whole numbers.<br>• Students performed satisfactorily in solving simple application problems.<br>• Students' performance in handling division problems involving remainders was steady.<br>• Students performed well in understanding the basic concept of fractions and comparing fractions. | • Students showed an outstanding performance in recognizing the place values of digits in a whole number and the values represented by the digits.<br>• Students were able to select digits to form 5-digit numbers satisfying specific criteria.<br>• Students did quite well in performing mixed operations of whole numbers and solving simple application problems.<br>• The majority of students were able to solve application problems and demonstrate working steps clearly in presenting their solutions.<br>• The majority of students were capable of using fractions to represent parts of a whole. | • Students were able to recognize the place values of digits in a whole number and the values represented by the digits.<br>• Students did quite well in performing mixed operations of whole numbers.<br>• The majority of students performed steadily in solving simple application problems.<br>• Students performed well in understanding the basic concept of fractions and comparing fractions. | • Students should study the questions carefully before answering. |
| **Weaknesses** | • Students were relatively weak in solving problems involving calculations of money, and they were particularly weak in solving problems involving division of money.<br>• A minority of students confused either the subtrahend with the minuend or the dividend with the divisor.<br>• Students sometimes misinterpreted questions due to carelessness. | • Some students were not aware of the concept about fractions that the whole must be divided into a number of equal parts.<br>• A very small proportion of students confused either the subtrahend with the minuend or the dividend with the divisor.<br>• A few students did not understand the meaning of the quotient and the remainder in solving problems of division and ignored the remainder.<br>• Students were particularly weak in performing division involving conversion of dollars to cents. | • Almost half of the students were weak in forming and ordering whole numbers up to 5 digits satisfying specific conditions.<br>• A few students read questions carelessly and could not give meaningful expressions.<br>• A very small proportion of students confused either the subtrahend with the minuend or the dividend with the divisor. | |

| Year / Measures | 2013 | 2014 | 2015 | Remarks |
|---|---|---|---|---|
| **Strengths** | • Students were able to identify Hong Kong money.<br>• Students could write the dates and days of a week from a calendar correctly.<br>• Students performed well in telling the time on a clock face or digital clock.<br>• Students were able to measure and compare the distance between objects.<br>• Students were able to use improvised units to compare the length of objects and the capacity of containers. | • Students were able to identify Hong Kong money.<br>• Students could write the dates and days of a week from a calendar correctly.<br>• Students performed well in telling the time on a clock face or digital clock.<br>• Students were able to measure and compare the length of objects and the capacity of containers.<br>• Students could record the length and weight of objects as well as the capacity of containers with suitable units.<br>• Students could choose appropriate measuring tools to measure length of objects and the capacity of containers. | • Students were able to identify Hong Kong money and read the price tags.<br>• Students performed well in telling the time on a clock face or digital clock.<br>• Students performed well in directly comparing the length and weight of objects, and the capacities of containers.<br>• Students did well in measuring objects with appropriate tools and recording answers with suitable measuring units. | • Students performed better in measuring and comparing the weight of objects than measuring the length of objects and capacity of containers.<br>• Students showed improvement when comparing the weight of objects and the capacity of containers. |
| **Weaknesses** | • In deducing the number of days of an activity, the performance of students was only fair.<br>• The performance of students in recording the duration of activities was only fair.<br>• Students' performance was poor in comparing the weight of objects directly or indirectly.<br>• Students were relatively weak in comparing the capacity of containers directly. | • Students' performance was only fair in handling the exchange of money.<br>• Students' performance was relatively weak in comparing the weight of objects and choosing appropriate measuring tools to measure the weight of objects. | • The performance of students in recording the duration of activities was only fair.<br>• Students were weak in using suitable units to measure and compare the capacity of containers. | |

| Year / Shape and Space | 2013 | 2014 | 2015 | Remarks |
|---|---|---|---|---|
| **Strengths** | • Students performed well in identifying or grouping 2-D and 3-D shapes.<br>• Students were capable of recognizing the simple characteristics of triangles.<br>• Students' performance was good in identifying straight lines and curves as well as tracing a pair of parallel lines or perpendicular lines.<br>• Students did well in recognizing right angles and comparing the size of angles.<br>• Students were capable of recognizing the four directions. | • Students improved in identifying 2-D shapes and 3-D shapes.<br>• Students' performance was stable in recognizing the simple characteristics of triangles.<br>• Students were good at identifying straight lines and curves as well as recognizing a set of parallel lines and perpendicular lines.<br>• Students performed well in comparing the size of angles.<br>• Students were capable of recognizing the four directions. | • Students' performance was stable in identifying 2-D shapes and 3-D shapes.<br>• Students were capable of recognizing the simple characteristics of triangles.<br>• Students were capable of identifying straight lines, curves, parallel lines and perpendicular lines.<br>• Students were able to recognize right angles and compare the size of angles.<br>• The performance of students was quite good in recognizing the four directions. | • It is suggested that students be shown 3-D objects of different shapes in the classrooms.<br>• 2-D shapes in 'non-standard orientation' could help enhance learning.<br>• Some students were not able to judge the correct direction relative to a given reference point. |
| **Weaknesses** | • Some students confused a triangular prism with a triangle.<br>• Many students were rather weak in identifying prisms.<br>• Some students confused 'long and thin' right-angled triangles with isosceles triangles. | • Some students were weak in grouping 2-D shapes and wrongly classify figures having curves and straight lines as polygons.<br>• There is room for improvement in recognizing the four directions when the 'north' direction on a map was not pointing upward. | • Some students easily mistook a prism with triangular faces to be a pyramid.<br>• A small number of students confused spheres with objects with round surfaces.<br>• Some students were weak in recognizing right-angled triangles.<br>• The performance of students dropped when the 'north' direction on a map was not pointing upward. | |

| Year / Data Handling | 2013 | 2014 | 2015 | Remarks |
|---|---|---|---|---|
| **Strengths** | • Students were good in reading the data given in the pictograms and carried out simple calculations.<br>• The majority of students were able to construct pictograms from tabular data. | • Students did well in reading and interpreting the data directly from given pictograms, and carry out simple calculations in order to answer questions.<br>• Students showed improvement in answering open-ended question.<br>• The majority of students were capable of constructing pictograms from tabular data. | • Students were able to read and compare the data given in pictograms in order to answer questions.<br>• Students performed steadily in answering open-ended question.<br>• Students were capable of constructing pictograms from tabular data. | • Students should choose the appropriate keywords for the titles.<br>• Students should use the data given in the pictogram in answering open-ended questions. |
| **Weaknesses** | • Students were not able to apply the actual data given in pictograms and give the correct inference and explanation when answering open-ended question. | • A few students used wrong and ambiguous keywords for the titles. | • A small proportion of students were weak in answering open-ended question using the actual data given in pictograms.<br>• Some students used the wrong and ambiguous keywords for the titles. | |