Results of Primary 3 Mathematics in Territory-wide System Assessment 2018

The percentage of Primary 3 students achieving Mathematics Basic Competency in 2018 is 88.0%.

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 Education Key Learning Area – Mathematics Curriculum Guide (P1-P6) (2000). The Assessment 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 96 test items (134 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 and to enable the equating of test scores. 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.

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	16(19)	14(19)	16(19)	15(19)	41(52)
Measures	8(13)	10(14)	8(12)	9(12)	28(39)
Shape and Space	7(10)	7(9)	7(10)	7(10)	21(29)
Data Handling	2(4)	2(4)	2(5)	2(5)	6(14)
Total	33(46)	33(46)	33(46)	33(46)	96(134)

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

Performance of Primary 3 Students Achieving Basic Competence in 2018

Primary 3 Number Dimension

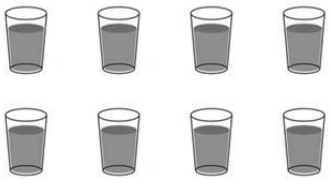
Students' performance in the Number Dimension was good. P.3 students were able to recognize the place values of digits in a whole number. They were capable of performing addition, subtraction, multiplication and division of whole numbers as well as the mixed operations. In general, students were able to solve application problems and showed working steps in their solutions. They understood the basic concepts of fractions and were able to compare fractions. However, some students were not able to master the computational rule of doing 'multiplication before addition' or 'multiplication before subtraction'. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

Understanding basic concepts of whole numbers and fractions

- Students performed very well in recognizing the place values of digits in a whole number (e.g. Q1/M1, Q1/M3) and the values represented by the digits (e.g. Q2/M2).
- The majority of students were able to express a whole number in Arabic numerals (e.g. Q2/M1) and order or write 5-digit numbers (e.g. Q3/M1, Q3/M3). However, in Q3/M1, a few students failed to give the correct answer according to specified criteria.

Q3/M1	
寫出一個比 9 899 大，又比 10 234 小的**單數**。	答案：10126 Answer: 99999

- Most students were capable of using a fraction to represent part of a whole (e.g. Q15/M1, Q12/M2). However, in Q13/M4, a small proportion of students misunderstood the meaning of the context due to carelessness in reading the question.

Q13/M4
桌子上有 8 杯飲品，果汁佔全部飲品的 $\frac{3}{4}$ ，其餘的是牛奶。 

(a) 桌子上有 8 杯果汁。 (b) 牛奶佔全部飲品的 $\frac{4}{8}$。	(a) There are 2 glasses of fruit juice on the table. (b) $\frac{6}{8}$ of the whole is milk.

- Most students could recognize the relationship between fractions and 1 as the whole (e.g. Q13(a)/M2). However, in Q16(a)/M1, a few students misunderstood that the value of $\frac{3}{3}$ is greater than that of 2.

- Students were generally able to compare fractions (e.g. Q16(b)/M1, Q13(b)/M2, Q14/M2, Q15/M4) but a few were quite weak in comparing fractions with the same numerators.

Q16(b)/M1	Q14/M2
(b) 在空格內填上適當的數字。 $\frac{5}{8}$ 比 $\frac{5}{7}$ 大。	籃子裏有些水果，桃佔全部的 $\frac{1}{6}$， 梨佔全部的 $\frac{1}{2}$，橙佔全部的 $\frac{1}{3}$。 最多的是 * (桃) / 梨 / 橙 。 (*圈出答案)

Performing basic calculations with whole numbers

- Students were good at performing the addition of whole numbers including carrying and repeated addition of 3-digit numbers (e.g. Q4/M1, Q3/M4). In Q4/M3, most students were able to answer question involving the commutative property of addition.

- The majority of students performed steadily in the subtraction of 3-digit numbers, involving decomposition and repeated subtraction (e.g. Q5/M1, Q6/M1, Q5/M3).

- Students were able to perform the multiplication of whole numbers up to 1 digit by 3 digits involving carrying (e.g. Q7/M1, Q6/M2, Q6/M3). In Q5/M4, most students were able to answer question involving the commutative property of multiplication.

- Students could generally perform the division of 3-digit numbers with 1-digit number (e.g. Q8/M1, Q7/M3, Q8/M4). However, in Q8/M1, a few students mistook '110' or '110…2' for the answer. In Q7/M3, a small proportion of students failed to put a '0' in the quotient and chose the incorrect option B.

- The majority of students were able to perform the mixed operations of addition and subtraction including small brackets (e.g. Q7/M4). Generally students could handle the mixed operations involving multiplication and subtraction/addition (e.g. Q9/M1, Q8/M3) but some of them neglected the computational rule of doing 'multiplication before subtraction' or 'multiplication before addition'.

Q9/M1	Q8/M3
$210 - 10 \times 8 =$ ○ A. 80 ○ B. 130 ○ C. 200 ● D. 1 600	$6 + 9 \times 4 =$ 60

Solving application problems

- Students in general were able to solve simple application problems involving addition, subtraction, multiplication, division or mixed operations (e.g. Q10/M1, Q11/M1, Q12/M1, Q9/M2, Q9/M3, Q11/M3). They demonstrated working steps in presenting their solution as well (e.g. Q14/M1, Q10/M2, Q11/M2, Q12/M3).
- In Q14/M1, most students did well in showing the correct solution.

Q14/M1	
還餘手工紙： 960 - 485 - 235 = 475 - 235 = 240(張)	960 - (485 + 235) = 960 - 720 = 240 ∴ 240 pieces of craft paper are left.

- In Q10/M2, a small proportion of students mistook multiplication to solve application problems involving division. A few students mixed up the 'dividend' with the 'divisor' in writing the mathematical expression, though they still got the correct answer.

Q10/M2	
246 × 3 = 738(元) 每張學生票售738元。	3 ÷ 246 = 82(元) 每張學生票售82元

- Although students could write the correct mathematical expressions, a few made mistakes in their calculations and got the wrong answers (e.g. Q11/M2, Q12/M3).

Q11/M2	Q12/M3
8+3×6 =11×6 =66 There are 66 eggs at home now.	90-(8×7) =90-54 =36 他還有36元

- The minority of students did not understand the questions and could not solve the application problems (e.g. Q11/M2, Q12/M3).

Q11/M2	Q12/M3
家中現有蛋： 8×3+6 =30(隻)	(90-8)×7 =82×7 =574 他還有574元

- The majority of students were able to solve problems involving the subtraction or the division of money (e.g. Q13/M1, Q13/M3). However, in Q13/M1, a few students could not perform subtraction involving decomposition. They mistook '12 dollars and 20 cents' for the answer. A few students were careless in reading the question and mistook addition for subtraction.

Q13/M1	
 16 元 5 角  4 元 7 角	一枝原子筆比一把直尺貴 21 元 2 角。

Primary 3 Measures Dimension

The performance of students was good in this dimension. The students were able to identify and use Hong Kong money as well as read price tags. Most of them were capable of comparing the length and weight of objects and the capacity of containers. They were capable of choosing appropriate tools for measuring the length and the weight as well as choosing appropriate units of measurement.

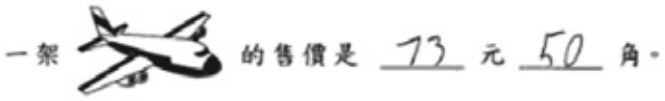
Most students were able to tell the time on a clock face or a digital clock. Students in general were able to read the dates on a calendar and apply the '24-hour time'. There

was room for improvement in their performance on inferring the duration of activities. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

Hong Kong money

- Most students could identify Hong Kong money (e.g. Q15/M2) but a few of them failed to read the price tags (e.g. Q17(a)/M1, Q16(a)/M2).

Q17(a)/M1



- Students were able to use Hong Kong money (e.g. Q17(b)/M1) and carry out simple money exchanges (e.g. Q17/M4). However, some students could not give the correct change (e.g. Q16(b)/M2).

Q16(b)/M2

Knowledge of time

- The majority of students were able to write the correct dates (e.g. Q19(a)/M2) and days of a week (e.g. Q19(b)/M1, Q19(b)/M2). Only a very small proportion of the students did not give the correct number of days under specific conditions (e.g. Q19(a)/M1).
- Most students were capable of telling the time shown on a digital clock (e.g. Q20(a)/M1) or a clock face (e.g. Q20(a)/M4). However, some of them were not able to measure the duration of an activity using 'hours' and 'minutes' (e.g. Q20(b)/M1, Q20(b)/M4).

Q20(b)/M1

數學比賽共用了 11 小時 45 分鐘。

- Students understood and applied the '24-hour time' correctly. However, a small number of students could not find the starting time of an activity (e.g. Q19(a)/M3).

Q19(a)/M3

	Starting Time
First Show	15:20
Second Show	16:35

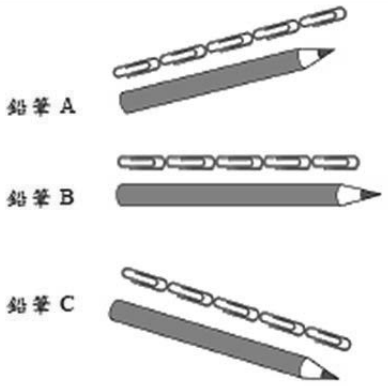
The first 'Dolphin Show' starts at 15 minute(s) past 20 in the * morning / (afternoon) .

(*Circle the answer)

Length, distance, weight and capacity

- Most students were able to directly compare the length of objects (e.g. Q17/M2) except a small proportion of them could not use improvised units to compare the lengths of different objects (e.g. Q18/M4).

Q18/M4



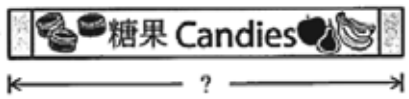
比較上圖三枝鉛筆的長度，

最短的是鉛筆 * A / (B) / C 。

（*圈出答案）

- Most students were capable of using the finger width as an 'ever-ready ruler' for measuring the length of an object (e.g. Q18/M1).
- The majority of students were capable of using a ruler to measure the length of an object except a small proportion confused 'centimetre' (cm) with 'millimetre' (mm) (e.g. Q20/M3).

Q20/M3



糖果盒的長度是 89 cm。

糖果盒的長度是 91 cm。

- The majority of students were good at the representation and comparison of distances given in 'kilometre' (km) (e.g. Q18/M3).
- The majority of students were able to choose suitable units for recording lengths (e.g. Q24(b)/M1, Q22(a)/M3) and the distance between two places (e.g. Q21/M4). However, a small proportion of students did not grasp the concept of 'metre' (m) and 'kilometre' (km).

Q21/M4

香港島與大嶼山之間的距離約 35 米 。

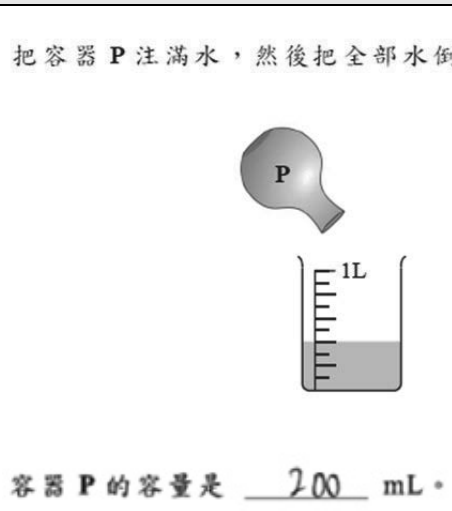
- The majority of students were able to compare the weight of objects directly (e.g. Q21/M3) and use improvised units to measure/compare the weights of different objects (e.g. Q21/M2).
- The majority of students were capable of measuring the weight of objects using 'gram' (g) or 'kilogram' (kg) (e.g. Q21(a)/M1, Q22/M2). They also performed well in comparing the weights of two objects (e.g. Q21(b)/M1).
- The majority of students were capable of choosing suitable units for measuring the weight of objects (e.g. Q24(a)/M1) but some of them confused the unit of weight with that of length (e.g. Q22(b)/M3).

Q22(b)/M3

一個橙重約 130 cm 。

- The majority of students were able to choose the appropriate measuring tools for measuring the weight of objects (e.g. Q22/M4).
- The majority of students were also able to compare the capacity of containers directly (e.g. Q22/M1) and use improvised units to measure and compare the capacity of containers (e.g. Q23/M4).
- The majority of students could measure the capacity of containers using 'litre' (L) or 'millilitre' (mL) (e.g. Q23/M1, Q23/M2) whereas the performance of a few was relatively weak in reading the scale on a measuring cup.

Q23/M2



- The majority of students were able to choose appropriate measuring tools for measuring the capacity of containers (e.g. Q23/M3).

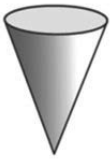
Primary 3 Shape & Space Dimension

The performance of students was stable in the Shape & Space Dimension. The majority of students were able to identify 2-D shapes, compare the size of angles, recognize right angles and the four directions. Students in general mastered the basic concepts of curves, parallel lines and perpendicular lines. The performance of students was comparatively weak in identifying 3-D shapes. 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 cones (e.g. Q25/M2).

Q25/M2



上面的立體圖形是一個

○ A. 三角形。
○ B. 角錐。
● C. 圓錐。
○ D. 圓柱。

- In Q26/M1, some students confused prisms with rectangles.

Q26/M1

上面的立體圖形是一個

○ A. 角柱。
○ B. 角錐。
○ C. 圓柱。
● D. 長方形。

- The majority of students were able to classify 3-D shapes (e.g. a cylinder in Q25(a)/M1). However, some students confused pyramids with cones (e.g. Q25(b)/M1).

Q25/M1

A. B. C.

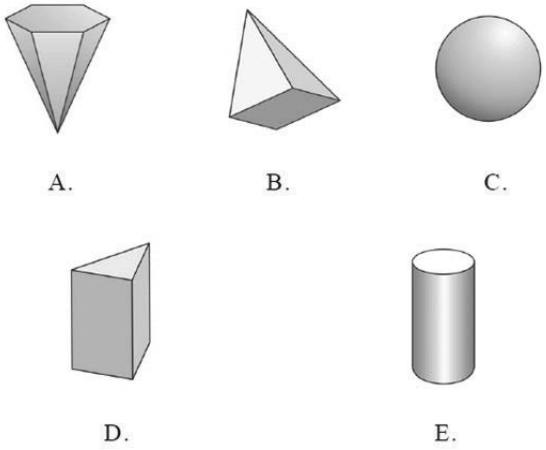
D. E.

(a) 圓柱：C

(b) 角錐：E, D

- About half of the students failed to recognize prisms. For instance, in Q26(a)/M2, they confused prisms with pyramids. Moreover, a small number of students mistook cylinders for spheres (e.g. Q26(b)/M2).

Q26/M2



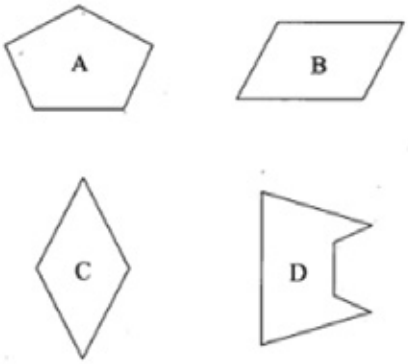
(a) 角柱：B A	(a) Prism(s): A, B, D
(b) 球體：E	(b) Sphere(s): C, E

- Most students were able to compare the heights of objects (e.g. Q29/M2).

2-D Shapes

- The majority of students could identify 2-D shapes including squares, rhombuses, trapeziums and pentagons (e.g. Q28(a)/M1, Q27/M2, Q27/M3). However, a number of students confused a hexagon with a pentagon (e.g. Q28(b)/M1).

Q28(b)/M1

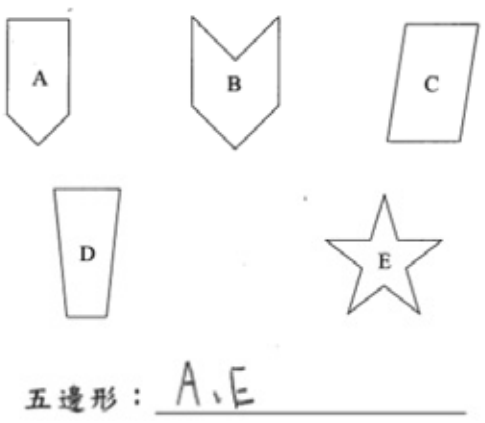


(b) 六邊形：A	Hexagon(s): A, D

- The majority of students were able to group 2-D shapes (e.g. Q27/M2, Q28/M4).

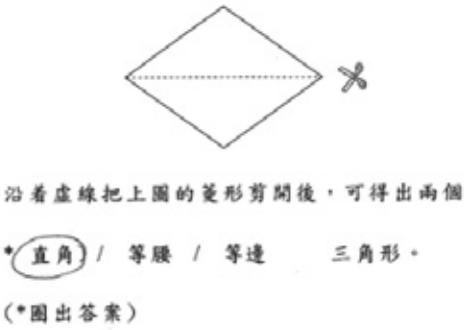
However, a few of them could not group 2-D shapes according to the number of sides. They confused a pentagon with a star-shaped figure (e.g. Q28(b)/M4).

Q28(b)/M4



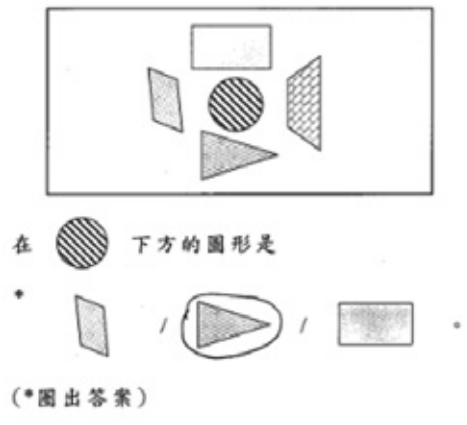
- The majority of students were capable of recognizing isosceles triangles and right-angled triangles (e.g. Q27/M1, Q29/M4). However, some of them mistook isosceles triangles for right-angled triangles (e.g. Q28/M2).

Q28/M2



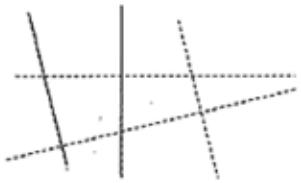
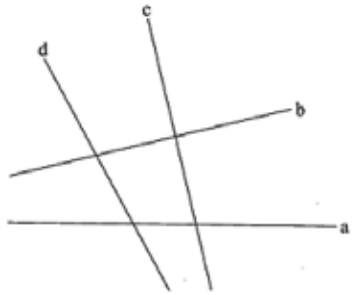
- Most students could recognize the relative positions of two 2-D shapes (e.g. Q25/M3).

Q25/M3

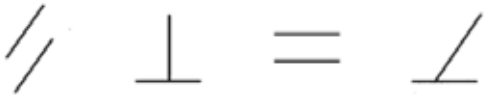


Straight Lines and Curves

- The majority of students were capable of identifying curves (e.g. Q29(a)/M3) and parallel lines (e.g. Q30/M1).
- A small proportion of students were unable to identify a pair of parallel lines (e.g. Q30/M1) or a pair of perpendicular lines (e.g. Q30/M2).

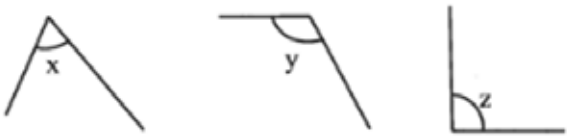
Q30/M1	Q30/M2
在下圖中，沿着虛線畫出一對平行線。 	 Lines b and a are a pair of perpendicular lines.

- Some students confused a pair of perpendicular lines with a pair of parallel lines (e.g. Q30/M4).

Q30/M4
 列出由垂直線組成的圖。 答案：C

Angles

- Most students were capable of recognizing the right angles in given figures (e.g. Q29/M1) and comparing the size of angles (e.g. Q31/M2).

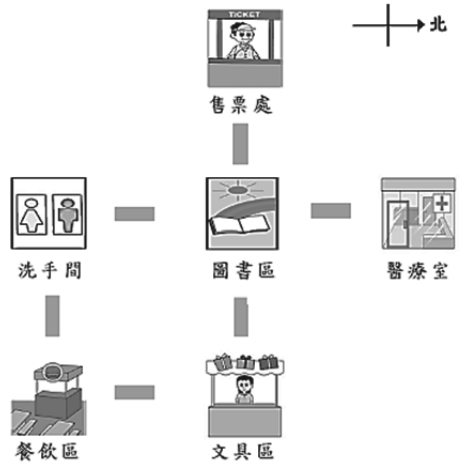
Q31/M2
 Answer: ∠y (Largest) , ∠z , ∠x (Smallest)

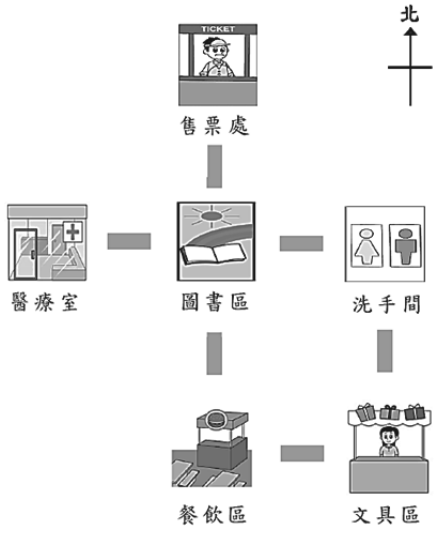
Directions

- The majority of students were capable of recognizing the four directions: east, south, west and north (e.g. Q31(a)/M1, Q31(a)/M3) and wrote specific directions correctly (e.g. Q31(b)/M3).

Q31(b)/M3	
子瑜從文具區向 西 方走，便到達餐飲區。	Starting from Stationery Zone, Eva goes West (direction) to reach Food Court.

- However, some students were unable to judge the correct direction relative to a reference point (e.g. Q31(b)/M1, Q31(b)/M3).

Q31(b)/M1	
	餐飲區在文具區的 * 東方 / 南方 / 西方 / (北方)。 (*圈出答案)

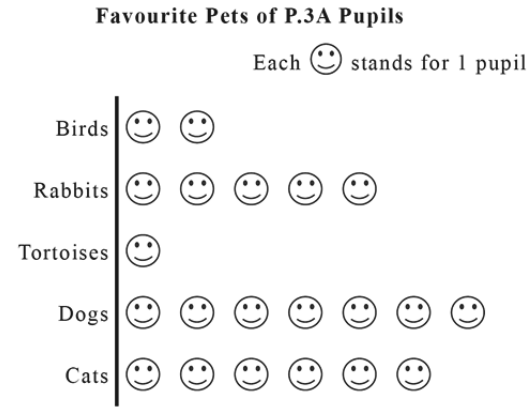
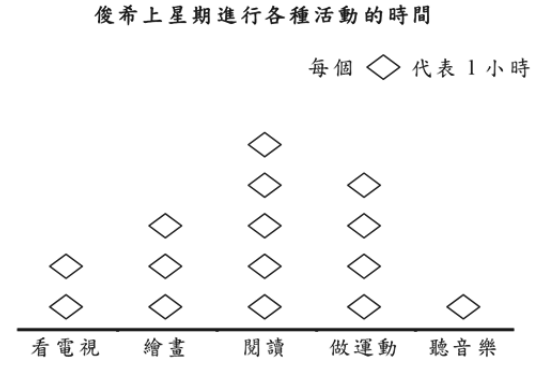
Q31(b)/M3
 子瑜從文具區向 東 方走，便到達餐飲區。

Primary 3 Data Handling Dimension

The performance of P.3 students was very good in the Data Handling Dimension. Students were good at reading pictograms. They could interpret the information given in pictograms to answer straightforward questions. Most students were able to construct pictograms from tabulated data. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

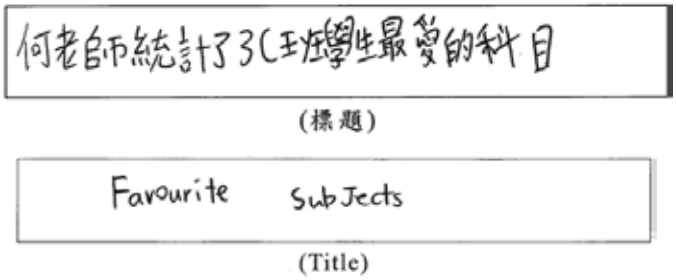
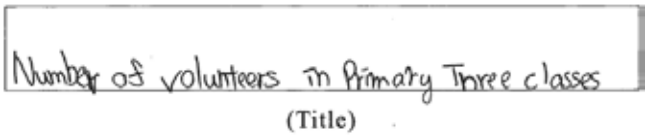
Reading and interpreting pictograms

- Most students were capable of reading pictograms with a one-to-one representation. They could directly read the data given in pictograms (e.g. Q32(a)/M2, Q32(a)/M3), then compare the data or carry out simple calculations in order to answer the questions (e.g. Q32/M1, Q32(b)/M2, Q32(b)/M3).
- A few students were careless in reading the questions and failed to give correct answers (e.g. Q32/M2, Q32(b)/M3).

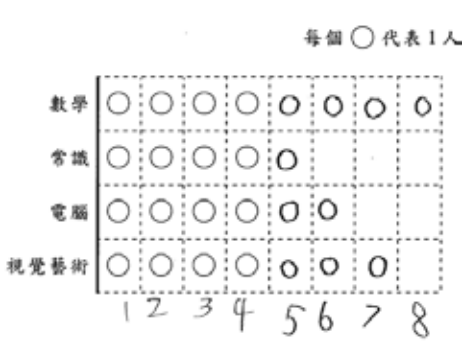
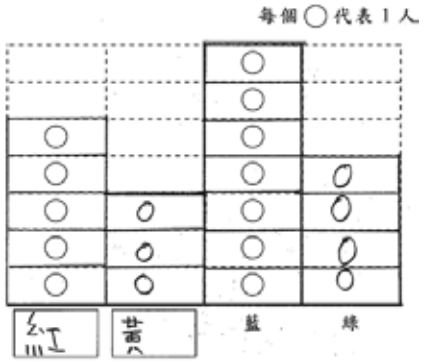
Q32/M2	Q32(b)/M3
 (a) The number of pupils who favoured cats was Dogs . (b) 最喜愛鳥和最喜愛兔的學生相差 7 人。	 (b) 上星期，俊希閱讀的時間和 繪畫 的時間相差 3 小時。 (b) 上星期，俊希閱讀的時間和 5 的時間相差 3 小時。

Constructing pictograms

- Almost all students were able to construct pictograms from tabular data and provide a proper title for a pictogram (e.g. Q33/M1, Q33/M3, Q33/M4).
- A few students were not able to give an explicit title in order to express the purpose of conducting the survey (e.g. Q33(1)/M1, Q33(b)(1)/M4).

Q33(1)/M1

Q33(b)(1)/M4


- A few students unnecessarily added a 'frequency axis' to represent the data given by a pictogram or wrongly drew a grid (e.g. Q33(2)/M1, Q33(b)(2)/M3).

Q33(2)/M1	Q33(b)(2)/M3
	

General Comments on Primary 3 Student Performances

P.3 students performed well in the Number Dimension. The majority of students mastered the basic concepts of whole numbers and fractions as well as the computational skills of the four operations in Key Stage 1. They were generally able to solve simple application problems and present working steps of solutions. Some students confused multiplication with division and neglected the computational rule of doing 'multiplication before addition' or 'multiplication before subtraction'.

The performance of P.3 students was good in the Measures Dimension. They were able to identify the Hong Kong currency, read the dates and days of a week on a calendar, tell time on a clock face or digital clock, compare the length, distance and weight of objects as well as measure and compare the capacity of containers. However, their

performance was weak in measuring the duration of an activity and giving the correct units of measurement.

The performance of P.3 students was stable in the Shape & Space Dimension. They were capable of recognizing curves, 2-D shapes, right angles and the four directions. However, there was room for improvement in identifying 3-D shapes as well as a pair of parallel lines and perpendicular lines.

P.3 students did very well in the Data Handling Dimension. Most students were able to read and interpret pictograms with a one-to-one representation. Only a few students failed to give correct answers due to carelessness in reading the questions related to the pictogram. Almost all students were able to construct pictograms from tabular data and provide a proper title for a pictogram.

Good Performance of Primary 3 Students in 2018

Students with good performance demonstrated mastery of the concepts and skills assessed by the sub-papers. They were more able in doing computations and could solve application problems with different contexts. They were also able to correctly present their solutions in solving problems (e.g. Q10/M2, Q12/M3).

Q10/M2	Q12/M3
每張學生票售： 246÷3 =82(元)	90-8×7 =90-56 =34 He has 34 dollars left.

Students with good performance had thorough conceptual understanding of the fractions. They could recognize the relationship between fractions and one as a whole and compare fractions.

Students with good performance were able to recognize and exchange Hong Kong money, understand the '24-hour time', and measure the duration of an activity. They could directly use or use improvised units to compare the length and weight of objects as well as the capacity of containers.

Students with good performance were capable of recording the length and the weight of objects with appropriate units (e.g. Q22/M3).

Q22/M3

在橫線上填上適當的度量單位。

(a) 一輛的士的長度約 5 米 。

(b) 一個橙重約 130 g 。

(a) The length of a taxi is about 5 m .

(b) An orange weighs about 130 g .

Students with good performance were capable of identifying different 3-D shapes and 2-D shapes. They could identify parallel lines and perpendicular lines. They were able to recognize right angles, compare the size of angles and correctly show the four directions including the 'north' direction pointing to the right of the map.

Students with good performance were able to read and interpret pictograms with a one-to-one representation. They performed well in comparing data and simple calculations to answer the questions according to the relevant information in the pictograms. They could construct pictograms by referring to the given raw data and provide a proper title for a pictogram (e.g. Q33/M4).

Q33/M4

黃老師統計了三年級各班家長義工的人數。

(a) 根據統計紀錄，完成下表。

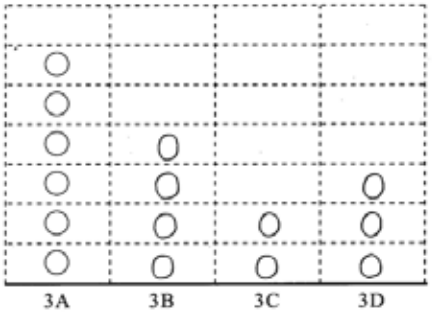
班別	3A	3B	3C	3D
紀錄	正一	正	丅	下
義工人數	6	4	2	3

(b) 根據統計結果，完成以下的象形圖，並加上標題。

三年級各班家長義工的人數

(標題)

每個 ○ 代表 1 人



Overview of Primary 3 Student Performances in Mathematics in 2016-2018

The percentages of P.3 students achieving Mathematics Basic Competency in 2016, 2017 and 2018 provided below.

Table 8.2 Percentages of P.3 Students Achieving Mathematics Basic Competency in 2016-2018

Year	% of Students Achieving Mathematics Basic Competency
2016	89.9
2017	88.2
2018	88.0

A comparison of the strengths and weaknesses of P.3 students in 2016, 2017 and 2018 provides useful information for teachers to help students improve their learning. The following tables provide an overview of student performances in each of the four dimensions for these years.

Table 8.3 Overview of P.3 Student Performances in Mathematics in 2016-2018

Year / Number	2016	2017	2018	Remarks
Strengths	• Students were able to recognize the place values of digits in a whole number and the values represented by the digits. • Students performed well in the mixed operations and solving application problems. • Students could show the solution and the working steps in solving problems. • Students were able to understand the basic concept of fractions and compare fractions.	• Students were able to recognize the places and the values of digits in a whole number. • Students performed steadily in the mixed operations and solving application problems. • Students were able to demonstrate working steps clearly in solving application problems. • Students performed well in understanding the basic concept of fractions and comparing fractions.	• Students demonstrated good recognition of the places and the values of digits in a whole number. • Students were able to perform the mixed operations and generally solve simple application problems. • Students performed well in showing the solution and the working steps in solving application problems. • Students could understand the basic concept of fractions and compare fractions.	• There was room for improvement in the small proportion of students who had difficulties with the concept of 'multiplication and division'. • A few students confused the minuend with the subtrahend or the dividend with the divisor in writing the mathematical expressions.
Weaknesses	• Some students did not understand the requirements of the questions and performed the calculations carelessly. • Some students could not write the correct mathematical expressions in solving problems or present the answer with the correct unit and conclusion.	• Some students confused multiplication with division in solving application problems. • A few students confused the minuend with the subtrahend in giving the mathematical expressions. • A small number of students were not able to master the computational rule of doing 'multiplication before addition'.	• Some students were not able to master the computational rule of doing 'multiplication before addition' or 'multiplication before subtraction'. • A few students did not understand the questions or write the correct mathematical expressions in solving application problems.	

Year / Measures	2016	2017	2018	Remarks
Strengths	• Students were able to identify Hong Kong money and read the price tags. • Students were capable of telling the dates and days of a week. • Students performed well in telling the time on a clock face or digital clock. • Students could measure and compare the length, weight and capacity of objects. • Students performed well in choosing appropriate tools to measure the height and weight of objects. • Students could record the length and weight of objects with appropriate units.	• Students were capable of reading the price tags and using Hong Kong money. • Students performed well in telling the dates and days of a week and the time on a clock face or a digital clock. • Students were able to measure and compare the length and weight of objects. • Students did well in choosing appropriate tools to measure the length and weight of objects, and the capacity of containers. • Students were able to record the length and weight of objects with appropriate units.	• Students were capable of reading the price tags, identifying and using Hong Kong money. • Students performed well in reading the dates and days of a week from a calendar, telling the time on a clock face or a digital clock. • Students were good at directly using or using improvised units to compare the length and the weight of objects. • Students performed well in choosing appropriate tools to measure the length and weight of objects, and the capacity of containers. • Students were good at directly comparing the capacity of containers.	• More daily examples can be used to introduce the units used for measuring length, weight and capacity.
Weaknesses	• When the amount involved in change is quite large, some students made careless mistakes in calculation. • Students were relatively weak in choosing the appropriate tools for measuring capacity.	• A few students' performance was only fair in money exchange. • Some students were comparatively weak in reading the capacity of containers.	• The performance in measuring the duration of an activity had room for improvement. • Students' performance declined in recording the length and weight of objects with appropriate units.	

Year / Shape and Space	2016	2017	2018	Remarks
Strengths	• Students' performance was stable in identifying 3-D and 2-D shapes. • Students were capable of identifying straight lines and curves as well as a pair of parallel lines. • Students performed well in recognizing the four directions.	• Students were able to identify general 3-D and 2-D shapes. • Students had good knowledge of the simple characteristics of triangles. • Students were good at identifying straight lines, curves and parallel lines. • Students performed well in recognizing right angles and comparing the size of angles. • Student performances in recognizing the four main directions were good.	• Students were able to identify standard 3-D and 2-D shapes. • The majority of students were capable of recognizing the characteristics of triangles. • The performance of students was stable in identifying curves, a pair of parallel lines or perpendicular lines. • Students performed well in recognizing right angles and comparing the size of angles. • Students' performance was stable in recognizing the four main directions.	P.3 students are weak in the following aspects: • recognizing the characteristics of different 3-D shapes, particularly prisms and pyramids. • determining the correct direction relative to a reference point.
Weaknesses	• Some students were not able to recognize perpendicular lines or confused perpendicular lines with parallel lines. • Some students were not able to judge the correct direction relative to a given reference point.	• Some students were not able to distinguish between prisms/cylinders and pyramids/cones. • A few students were not able to recognize perpendicular lines. • Some students were not able to judge the correct direction relative to a given reference point.	• Students' performance was weak in identifying 3-D shapes, particularly prisms and pyramids. • Individual students had room for improvement in classifying 2-D shapes.	

Year / Data Handling	2016	2017	2018	Remarks
Strengths	• Students were able to read information from the data given in pictograms and interpret data to answer straightforward questions. • Students could construct pictograms by referring to the given raw data.	• Students were able to read pictograms and retrieve data from the pictogram to answer simple questions. • Students were able to construct pictograms by referring to the given raw data.	• Students were good at reading pictograms. They could retrieve data from the pictogram to answer simple questions. • Students were able to construct pictograms by referring to the given raw data.	• Students have to read carefully and understand the questions when they solve the problems related to the pictogram.
Weaknesses	• A few students could not express explicitly in the title about the purpose of conducting the survey.	• A few students were not able to give an explicit title for the pictogram.	• A few students were weak in giving an explicit title for the pictogram.	