

Results of Primary 3 Mathematics in Territory-wide System Assessment 2019

The percentage of Primary 3 students achieving Mathematics Basic Competency in 2019 is 87.7%.

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 95 test items (133 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(12)	10(14)	8(12)	9(12)	27(38)
Shape and Space	7(10)	7(9)	7(11)	7(10)	21(29)
Data Handling	2(5)	2(4)	2(4)	2(5)	6(14)
Total	33(46)	33(46)	33(46)	33(46)	95(133)

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

Performance of Primary 3 Students Achieving Basic Competency in 2019

Primary 3 Number Dimension

- The performance of P.3 students was good in the Number dimension. They were able to recognize the place values of digits in a whole number. They performed well in addition, subtraction, multiplication and division of whole numbers as well as the mixed operations. Students in general 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, a few students confused the minuend with the subtrahend in giving the mathematical expressions. 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’ performance was satisfactory 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. Q3/M1). Only a few students wrongly expressed ‘ninety thousand four hundred and ten’ as ‘9 410’ or ‘900 410’.
- Students could generally order or write 5-digit numbers (e.g. Q2/M1, Q3/M2). However, in Q2/M1, a minority of students failed to give an even number as the answer according to specified criteria and chose the incorrect option D.
- Most students were capable of using a fraction to represent part of a whole (e.g. Q15/M1, Q14/M3). However, in Q13(a)/M4, a small proportion of students got the wrong answers due to carelessness in reading the question.

Q13/M4

There are 10 cups of ice cream in the refrigerator.

$\frac{2}{5}$ of the whole is vanilla ice cream and 3 cups are chocolate ice cream.



<p>(a) 朱古力雪糕佔全部雪糕的 $\frac{\boxed{3}}{\boxed{5}}$ 。</p> <p>(b) 香草雪糕有 <u>4</u> 杯。</p>	<p>(a) $\frac{\boxed{8}}{\boxed{10}}$ of the whole is chocolate ice cream.</p> <p>(b) There are <u>2</u> cups of vanilla ice cream.</p>
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- Most students could recognize the relationship between fractions and 1 as the whole (e.g. Q13(a)/M2). However, in Q16(a)/M1, some students misunderstood that the value of 6 is equal to that of $\frac{6}{6}$.
- In general, students were able to compare fractions (e.g. Q16(b)/M1, Q13(b)/M2, Q14/M2, Q15/M4) but a small proportion of students were quite weak in comparing fractions with the same numerators.

Q16(b)/M1	Q14/M2
<p>(b) 在空格內填上適當的數字。</p> <p>$\frac{2}{\boxed{6}}$ 比 $\frac{2}{7}$ 小。</p>	<p>桌子上有一包手工紙。明明取去全部的 $\frac{1}{5}$，</p> <p>寶寶取去全部的 $\frac{1}{6}$，玲玲取去全部的 $\frac{1}{3}$。</p> <p>* 明明 / 寶寶 / 玲玲 取去的手工紙最少。</p> <p>(* 圈出答案)</p>

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, Q4/M3, Q3/M4).
- The majority of students could perform subtraction of 3-digit numbers, involving decomposition and repeated subtraction (e.g. Q5/M1, Q5/M2, Q4/M4).
- Students were capable of performing the multiplication of whole numbers up to 1 digit by 3 digits involving carrying (e.g. Q6/M1, Q6/M2, Q5/M4). In Q9/M1, most students were able to answer question involving the commutative property of multiplication.
- Generally, students could perform division of 3-digit numbers with 1-digit number (e.g. Q7/M1, Q7/M2, Q6/M4). However, in Q7/M1, some students failed to put a '0' in the quotient and chose the incorrect option B.
- Students performed quite well in performing the mixed operations of addition and subtraction including small brackets (e.g. Q8/M1). A few students neglected the

computational rule of doing ‘multiplication before addition/ subtraction’ in handling the mixed operations involving multiplication and addition/ subtraction (e.g. Q8/M2, Q8/M3).

Q8/M2	Q8/M3
$19 + 5 \times 4 =$ <p> <input type="radio"/> A. 20 <input type="radio"/> B. 24 <input type="radio"/> C. 39 <input checked="" type="radio"/> D. 96 </p>	$24 - 7 \times 2 = \underline{34}$

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, Q11/M2, Q9/M3, Q10/M3). They demonstrated working steps in presenting their solution as well (e.g. Q14/M1, Q9/M2, Q10/M2, Q12/M3).
- In Q11/M1 and Q10/M3, a small proportion of students mistook multiplication to solve application problems involving division.

Q11/M1
<p>宇軒和健東一起去快餐店，各吃了一份套餐， 共付 98 元，平均每份套餐售 <u>196</u> 元。</p>

Q10/M3
<p>做一個蛋糕需要 3 隻蛋。美玲有 40 隻蛋，最多 可做蛋糕</p> <p> <input checked="" type="radio"/> A. 120 個。 <input type="radio"/> B. 37 個。 <input type="radio"/> C. 14 個。 <input type="radio"/> D. 13 個。 </p>

- In Q11/M2, a small proportion of students was careless in reading the question and mistook repeated subtraction for the answer.

Q11/M2

罐內原有 195 塊餅乾，珊珊再把 25 塊餅乾放入罐內，
然後吃去 38 塊。罐內還餘 132 塊餅乾。

- A few students mixed up the 'minuend' with the 'subtrahend' in writing the mathematical expression, though they still got the correct answer (e.g. Q14/M1, Q9/M2).

Q14/M1

$$\begin{aligned} & 29 - 8 \times 4 \\ & = 32 - 29 \\ & = 3 \\ \text{安安} & \text{比} \text{大明} \text{多付} \underline{3} \text{元} \end{aligned}$$

Q9/M2

$$\begin{aligned} & (33 + 27) - 96 \\ & = 96 - 60 \\ & = 36 \\ & 36 \text{ seats are left} \end{aligned}$$

- In Q9/M2, a very small proportion of students missed the bracket in writing the mathematical expression.

Q9/M2

$$\begin{aligned} & \text{空置座位還有:} \\ & 96 - 33 + 27 \\ & = 96 - 60 \\ & = \underline{36} \text{ (個)} \end{aligned}$$

- Although students could write the correct mathematical expressions, a few made mistakes in their calculations and got the wrong answers (e.g. Q14/M1, Q12/M3).

Q14/M1

$$\begin{aligned} & \text{安安比} \text{大明} \text{多付:} \\ & 8 \times 4 - 29 \\ & = 36 - 29 \\ & = 7 \text{ (元)} \end{aligned}$$

Q12/M3

$$\begin{aligned} & 9 \times 3 + 6 \\ & = 27 + 6 \\ & = \underline{93} \text{ books} \\ & \text{Ans: } 93 \text{ books are in the bookcase.} \end{aligned}$$

- The majority of students were able to solve problems involving the addition or the multiplication of money (e.g. Q13/M1, Q13/M3). However, a few students failed to change 100 cents into 1 dollar when attempting the response. They mistook ‘30 dollars and 150 cents’ or ‘43 dollars and 150 cents’ for the answer.

Q13/M1

大雄每天儲蓄 10 元 5 角，3 天共儲蓄
30 元 15 角。

Q13/M3

I have 40 dollars
and 70 cents.

I have 3 dollars
and 80 cents.



Ann



Tom

Ann and Tom have 43 dollars and 150 cents
altogether.

Primary 3 Measures Dimension

- P.3 students performed well in the Measures Dimension. Generally, the students were able to identify Hong Kong money and read price tags. The majority of students were able to tell the time from a clock face or a digital clock, give the dates and days of a week and use the ‘24-hour time’. They were capable of measuring and comparing the length and weight of objects as well as the capacity of containers. They were capable of choosing the appropriate measuring tool as well. Some students could not give the correct change or use appropriate units of measurement for recording the length and weight of objects. Further comments on students’ performance are provided below with examples from different sub-papers quoted in brackets.

Hong Kong money

- The majority of students could identify the Hong Kong money (e.g. Q15/M2).
- Most students were able to read the price tags (e.g. Q17(a)/M1, Q17(a)/M3) and use the Hong Kong money (e.g. Q17(b)/M1). However, some students could not give the correct change (e.g. Q17(b)/M3).

- A minority of students were unable to carry out simple money exchanges (e.g. Q17/M4).

Q17/M4

**Knowledge of time**

- The majority of students were able to write the correct dates and days of a week according to specific conditions (e.g. Q18/M1, Q17/M2).
- Most students were capable of reading a clock face (e.g. Q19(a)/M1) or a digital clock (e.g. Q21(a)/M4).
- Students were able to measure the duration of an activity using ‘hours’ and ‘minutes’ (e.g. Q21(b)/M4). However, in Q19(b)/M1, a small proportion of students were not able to record the duration in ‘minutes’.

Q19/M1

早上，郵差從郵政局出發的時間是



(a) 郵差的出發時間是

上午 8 時 15 分。

(b) 郵差在上午 9 時到達學校。他從郵政局到學校

用了 60 分鐘。


- Most students understood and applied the ‘24-hour time’ (e.g. Q20/M3).

Length, distance, weight and capacity


- Most students could directly compare the length of objects (e.g. Q18/M4) and use improvised units to compare the lengths of different objects (e.g. Q20/M1).
- Most students were capable of using the stride length as an ‘ever-ready ruler’ to measure length (e.g. Q21/M1).

Q21/M1

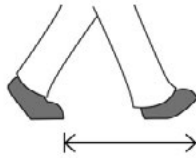
Which of the following is most suitable for measuring the length of a school playground?



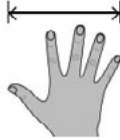
A.



B.



C.



D.

- The majority of students were capable of using a ruler to measure the length of an object (e.g. Q18/M3) and use ‘kilometre’ to represent and compare distances (e.g. Q23/M3).
- The majority of students were able to use a suitable unit for recording the length of an object (e.g. Q19(b)/M3).
- Some students did not have a clear concept of ‘millimetre’ (mm) and ‘centimetre’ (cm) (e.g. Q22/M1, Q24(a)/M2).

Q22/M1

一把雨傘長約 60 mm 。

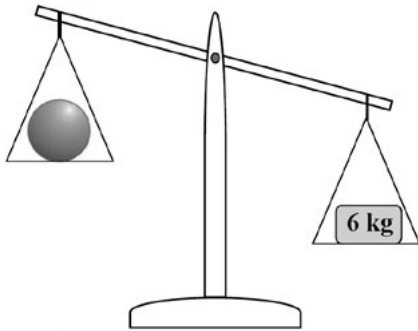
- Some students confused the unit of length with that of weight (e.g. Q24(b)/M2).

Q24(b)/M2

一個紙杯重約 5 厘米。

- A few students were unable to compare the weight of objects directly (e.g. Q21/M3).

Q21/M3

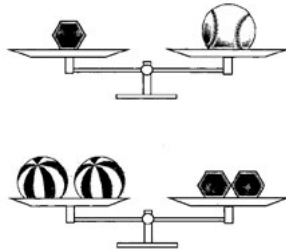


The weight of  may be









- A. 5 kg.
- B. 6 kg.
- C. 7 kg.
- D. 8 kg.

- Some students were not capable of measuring the weight of different objects using improvised units (e.g. Q19/M2).

Q19/M2



Study the diagram above. Which of the following is correct?

- A.  is heavier than .
- B.  is lighter than .
- C.  and  weigh the same.
- D. The weights of  and  cannot be compared.

- The majority of students were able to measure and compare the weight of objects using 'kilogram' (e.g. Q23/M1, Q20/M2).
- Students in general were able to use a suitable unit for measuring the weight of an object (e.g. Q24(b)/M2, Q19(a)/M3). However, in Q24(b)/M2, a small number of students confused 'gram' (g) with 'kilogram' (kg) or mistook the unit of length for the answer.

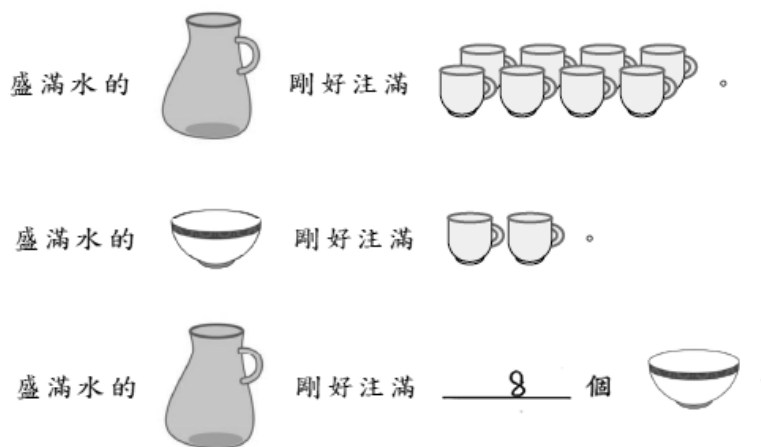
Q24(b)/M2

(b) 一個紙杯重約 5 kg 。

(b) A paper cup weighs about 5 cm .

- A small proportion of students were not able to measure and compare the capacity of containers using improvised units (e.g. Q22/M2).

Q22/M2



- The majority of students were able to measure the capacity of containers using ‘millilitre’ (e.g. Q24/M1, Q22/M3).
- The majority of students were able to use appropriate tools for measuring the length, weight and capacity (e.g. Q21/M2, Q24/M3, Q23/M4).

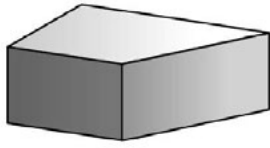
Primary 3 Shape & Space Dimension

- The performance of P.3 students was stable in the Shape & Space Dimension. The majority of students were able to identify curves, parallel lines and perpendicular lines. They were capable of comparing the size of angles as well as recognizing right angles and the four directions. However, some students were relatively weak in identifying 3-D and 2-D shapes. Further comments on students’ performance are provided below with examples from different sub-papers quoted in brackets.

3-D Shapes

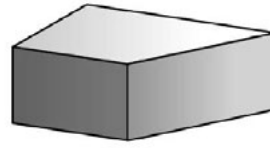
- In general, students were capable of identifying 3-D shapes including prisms and spheres (e.g. Q25/M1, Q26/M3). However, about half of the students easily confused 2-D shapes with 3-D shapes when the base of a prism is a trapezium.

Q25/M1



上面的立體圖形是一個

- A. 角柱。
 B. 長方形。
 C. 角錐。
 D. 梯形。

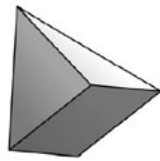


The 3-D shape above is a

- A. prism.
 B. rectangle.
 C. pyramid.
 D. trapezium.

- Students could generally classify 3-D shapes (e.g. Q26/M1, Q26/M2). However, in Q26(a)/M1, a few students mistook pyramids for cones.

Q26(a)/M1



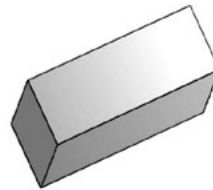
A.



B.



C.



D.

(a) 圓錐： B, A

- In Q26/M2, some students mistook cylinders for prisms, or confused cones with pyramids.

Q26/M2



A.



B.



C.



D.



E.

(a) 角柱: B, D, E

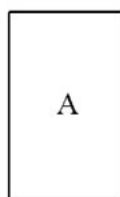
(b) 角錐: A, C

- The majority of students were able to compare the widths of objects (e.g. Q25/M2).

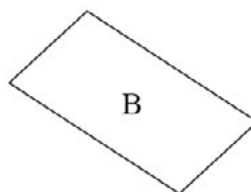
2-D Shapes

- Students could identify 2-D shapes including trapeziums, rectangles and rhombuses (e.g. Q27/M2, Q27/M3). However, in Q27(a)/M3, some of them confused rectangles with parallelograms.

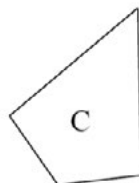
Q27(a)/M3



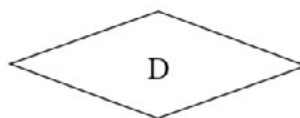
A



B



C

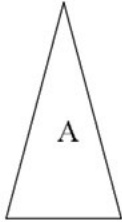
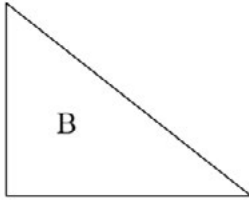
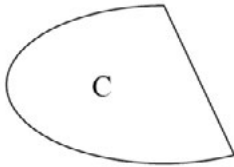
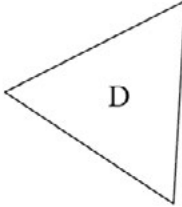


D

(a) 長方形: A, B

- The majority of students were capable of classifying 2-D shapes such as quadrilaterals, pentagons and hexagons (e.g. Q27/M1, Q29/M4).

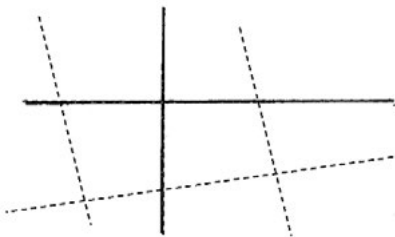
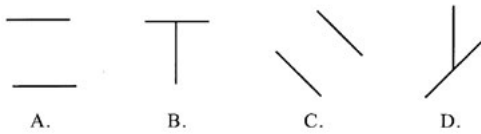
- The performance of students was good at recognizing right-angled triangles and isosceles triangles (e.g. Q29/M1, Q28/M4). However, in Q28/M3, some students confused equilateral triangles with isosceles triangles.

Q28/M3	
 <p>A</p>	 <p>B</p>
 <p>C</p>	 <p>D</p>
等邊三角形： <u> A </u>	

- Most students could describe the relative positions of two 2-D shapes (e.g. Q27/M4).

Straight Lines and Curves

- The majority of students were capable of identifying curves and parallel lines (e.g. Q30/M2, Q29/M3).
- The majority of students were able to identify perpendicular lines (e.g. Q28/M1, Q30/M4).

Q28/M1	Q30/M4
	 <p>A. B. C. D.</p> <p>列出一對垂直線的圖。</p> <p>答案： <u> B </u></p>

Angles

- Most students were capable of comparing the size of angles (e.g. Q30/M1).

Directions

- The majority of students were capable of recognizing the four directions: east, south, west and north (e.g. Q31(a)/M1, Q31/M3). However, some students were not able to judge the correct direction relative to a reference point (e.g. Q31(b)/M1).

Q31(b)/M1

(b) 洗手間在急救站的

* 東方 / 南方 / 西方 / 北方。

(*圈出答案)

Primary 3 Data Handling Dimension

- The performance of P.3 students was satisfactory in the Data Handling Dimension. Students were capable of 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 good at reading pictograms with a one-to-one representation. They could read the data given in pictograms (e.g. Q32(a)/M1, Q32(a)/M2, Q32/M3), then compare the data or carry out simple calculations in order to answer the questions (e.g. Q32(b)/M1, Q32(b)/M2).

Q32/M1	Q32/M3																																														
<p>Number of Times that Primary Three Classes Used the Printer Last Week</p> <p style="text-align: center;">Each stands for 1 time</p> <table style="margin-left: 20px;"> <tr> <td style="padding-right: 10px;">3A</td> <td></td> </tr> <tr> <td>3B</td> <td></td> </tr> <tr> <td>3C</td> <td></td> </tr> <tr> <td>3D</td> <td></td> </tr> <tr> <td>3E</td> <td></td> </tr> </table> <p>(a) Last week, Class <u>3E</u> used the printer the most. There were <u>6</u> times.</p> <p>(b) Altogether, Primary Three classes used the printer <u>18</u> times last week.</p>	3A		3B		3C		3D		3E		<p>3C 班學生前往各個地區觀看龍舟比賽的人數</p> <p style="text-align: right;">每個 代表 1 人</p> <table style="margin-left: 20px; text-align: center;"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>屯門</td> <td>赤柱</td> <td>沙田</td> <td>長洲</td> <td>西貢</td> <td></td> </tr> </table> <p>(a) 前往屯門觀看龍舟比賽的學生有 <u>3</u> 人。</p> <p>(b) 前往西貢和 <u>沙田</u> 觀看龍舟比賽的學生人數相同，各有 <u>4</u> 人。</p>																															屯門	赤柱	沙田	長洲	西貢	
3A																																															
3B																																															
3C																																															
3D																																															
3E																																															
屯門	赤柱	沙田	長洲	西貢																																											

Constructing pictograms

- Most students were able to construct pictograms from tabular data and provide a proper title for a pictogram (e.g. Q33/M1, Q33/M2, 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)/M2, Q33(b)(1)/M4).

Q33(1)/M2

張老師統計了3D班學生最喜愛收集的物件

(標題)

Q33(b)(1)/M4

3B班學生最喜愛的蛋糕數量

(標題)

The pupils of P.3B voted for their favourite cakes.

(Title)

- A very small proportion of students unnecessarily drew a grid or added a ‘frequency axis’ to represent the data given by a pictogram (e.g. Q33(2)/M3, Q33(b)(2)/M1).

Q33(2)/M3	Q33(b)(2)/M1																																																																																							
<p style="text-align: right;">每個 ○ 代表 1 人</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">郵票</td> <td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td> </tr> <tr> <td>明信片</td> <td>○</td><td>○</td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>貼紙</td> <td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td></td><td></td> </tr> <tr> <td>磁貼</td> <td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td></td> </tr> </table>	郵票	○	○	○	○	○	○	○	明信片	○	○						貼紙	○	○	○	○	○			磁貼	○	○	○	○	○	○		<p style="text-align: center;">Number of Different Fruits in the Basket</p> <p style="text-align: center;">Each ○ stands for 1 fruit</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td></td> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> <tr> <td>Pears</td> <td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Apples</td> <td>○</td><td>○</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Mangoes</td> <td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td> </tr> <tr> <td>Oranges</td> <td>○</td><td>○</td><td>○</td><td>○</td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>			1	2	3	4	5	6	7	8	9	Pears	○	○	○	○	○	○					Apples	○	○									Mangoes	○	○	○	○	○	○	○	○	○	○	Oranges	○	○	○	○						
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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. A small proportion of students mistook multiplication to solve application problems involving division. A few students mixed up the ‘minuend’ with the ‘subtrahend’ in writing the mathematical expression.
- The performance of P.3 students was good in the Measures Dimension. They were able to identify Hong Kong money, read the dates and days of a week on a calendar, read a clock face and a digital clock and compare the length and weight of objects directly. However, their performance was relatively weak in giving the change, comparing the weight of objects using improvised units and using appropriate units of measurement for recording the length and weight.
- The performance of P.3 students was stable in the Shape & Space Dimension. They were capable of recognizing curves, comparing the size of angles and identifying the four directions. They were able to distinguish between parallel lines and perpendicular lines. However, a considerable number of students could not identify 3-D shapes and 2-D shapes or find out the correct direction from a reference point.
- The performance of P.3 students was satisfactory in the Data Handling Dimension. Most students were able to read pictograms with a one-to-one representation and

interpret the data given in the pictogram to answer simple questions. 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 2019






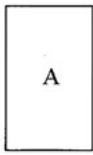
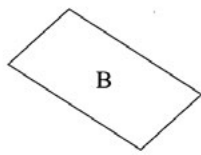
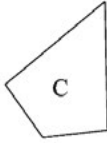
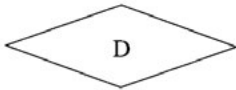
- Students with good performance demonstrated mastery of the concepts and skills assessed by the sub-papers. They were more able in doing computations and could solve application problems with different contexts. They were also able to correctly present their solutions in solving problems (e.g. Q14/M1, Q12/M3).

Q14/M1	Q12/M3
$8 \times 4 - 29$ $= 32 - 29$ $= 3$ <p>Anna pays 3 dollars more than Joe</p>	<p>書櫃裏共有書:</p> $6 + 9 \times 3$ $= 6 + 27$ $= 33 \text{ (本)}$

- Students with good performance were able to give correct change as well as use improvised units to compare the weight of objects or the capacity of containers.
- Students with good performance were capable of recording the thickness and the weight of objects with appropriate units (e.g. Q24/M2).

Q24/M2	
<p>(a) 一部手提電話厚約 8 <u>mm</u>。</p> <p>(b) 一個紙杯重約 5 <u>g</u>。</p>	<p>(a) A mobile phone is about 8 <u>mm</u> thick.</p> <p>(b) A paper cup weighs about 5 <u>g</u>。</p>

- Students with good performance were capable of identifying different 3-D shapes and 2-D shapes (e.g. Q26/M2, Q27/M3).

Q26/M2	Q27/M3
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  A. </div> <div style="text-align: center;">  B. </div> <div style="text-align: center;">  C. </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  D. </div> <div style="text-align: center;">  E. </div> </div> <p>列出：</p> <p>(a) 角柱： <u>D, E</u></p> <p>(b) 角錐： <u>C</u></p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  A </div> <div style="text-align: center;">  B </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  C </div> <div style="text-align: center;">  D </div> </div> <p>List:</p> <p>(a) Rectangle(s): <u>A</u></p> <p>(b) Rhombus(es): <u>D</u></p>

- Students with good performance were capable of identifying parallel lines, perpendicular lines and the four directions including the ‘north’ direction pointing to the right of the map.
- Students with good performance were able to read 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																																								
<p>3B 班學生以一人一票方式，選出最喜愛的蛋糕。</p> <p>(a) 根據統計紀錄，完成下表。</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">蛋糕</th> <th style="padding: 5px;">草莓蛋糕</th> <th style="padding: 5px;">朱古力蛋糕</th> <th style="padding: 5px;">芝士蛋糕</th> <th style="padding: 5px;">芒果蛋糕</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">紀錄</td> <td style="padding: 5px;">正一</td> <td style="padding: 5px;">下</td> <td style="padding: 5px;">正丁</td> <td style="padding: 5px;">正</td> </tr> <tr> <td style="padding: 5px;">人數</td> <td style="padding: 5px;">6</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">7</td> <td style="padding: 5px;">5</td> </tr> </tbody> </table>	蛋糕	草莓蛋糕	朱古力蛋糕	芝士蛋糕	芒果蛋糕	紀錄	正一	下	正丁	正	人數	6	3	7	5	<p>(b) 根據統計結果，完成以下的象形圖，並加上標題。</p> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"> <p>3B 班學生最喜愛的蛋糕</p> <p>(標題)</p> </div> <p style="text-align: center;">每個 ○ 代表 1 人</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tbody> <tr> <td style="width: 25%; height: 20px;">○</td> <td style="width: 25%; height: 20px;">○</td> <td style="width: 25%; height: 20px;">○</td> <td style="width: 25%; height: 20px;">○</td> </tr> <tr> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> </tr> <tr> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> </tr> <tr> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> </tr> <tr> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> </tr> <tr> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> <td style="height: 20px;">○</td> </tr> </tbody> </table> <div style="display: flex; justify-content: space-around; font-size: small; margin-top: 5px;"> 草莓蛋糕 朱古力蛋糕 芝士蛋糕 芒果蛋糕 </div>	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
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Overview of Primary 3 Student Performances in Mathematics in 2017-2019

The percentages of P.3 students achieving Mathematics Basic Competency in 2017, 2018 and 2019 are provided below.

Table 8.2 Percentages of P.3 Students Achieving Mathematics Basic Competency in 2017-2019

Year	% of Students Achieving Mathematics Basic Competency
2017	88.2
2018	88.0
2019	87.7

A comparison of the strengths and weaknesses of P.3 students in 2017, 2018 and 2019 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 2017-2019

Year Number	2017	2018	2019	Remarks
Strengths	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. • Students could generally solve application problems. They were able to show the solution and the working steps in solving problems. • Students were able to understand the basic concept of fractions and compare fractions. 	<ul style="list-style-type: none"> • Students should carefully read the questions and understand the requirements of the questions before answering.
Weaknesses	<ul style="list-style-type: none"> • 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'. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • A few students confused the minuend with the subtrahend in writing the mathematical expressions. • A few students were careless in reading the question and got the wrong solutions. 	

Year Measures	2017	2018	2019	Remarks
Strengths	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 or using improvised units to measure 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. 	<ul style="list-style-type: none"> 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 or using improvised units to measure the length of objects and the capacity of containers. Students performed well in choosing appropriate tools to measure the length and weight of objects, and the capacity of containers. 	<ul style="list-style-type: none"> More examples of exchange of money in daily life can be demonstrated. More examples in using appropriate units of measurement for recording the length, weight and capacity can be shown.
Weaknesses	<ul style="list-style-type: none"> A few students' performance was only fair in money exchange. Some students were comparatively weak in reading the capacity of containers. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The performance of students was relatively weak in using improvised units to measure the weight of objects. There was room for improvement in recording the length and weight of objects with appropriate units. 	

Shape and Space	Year	2017	2018	2019	Remarks
Strengths	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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, parallel lines and 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. 	<ul style="list-style-type: none"> Students were able to identify standard 3-D and 2-D shapes. Students were capable of recognizing the characteristics of triangles. The performance of students was stable in identifying curves, parallel lines and 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. 	<ul style="list-style-type: none"> Real objects and examples of different 3-D and 2-D shapes can be shown. Examples of different types of triangles and quadrilaterals can be shown. 	
Weaknesses	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Students' performance was weak in identifying 3-D shapes, particularly prisms and pyramids. Individual students had room for improvement in classifying 2-D shapes. 	<ul style="list-style-type: none"> Students' performance was relatively weak in identifying 3-D shapes. The students had room for improvement in recognizing triangles and quadrilaterals. 		

Year Data Handling	2017	2018	2019	Remarks
Strengths	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Students were able to read pictograms and retrieve data from the pictogram to answer simple questions. Students were good at constructing pictograms by referring to the given raw data. 	<ul style="list-style-type: none"> Let the students understand the key points in writing the title of pictogram.
Weaknesses	<ul style="list-style-type: none"> A few students were not able to give an explicit title for the pictogram. 	<ul style="list-style-type: none"> A few students were weak in giving an explicit title for the pictogram. 	<ul style="list-style-type: none"> A few students could not express the pictogram title explicitly. 	