

Results of Primary 3 Mathematics in Territory-wide System Assessment 2023

The percentage of Primary 3 students achieving Mathematics Basic Competency in 2023 is 86.5%.

Primary 3 Assessment Design

The assessment tasks for P.3 were based on the *Basic Competency Descriptors for Key Stage 1 Mathematics Curriculum* and the *Mathematics Education Key Learning Area Curriculum Guide (Primary 1 – Secondary 6) (2017)*. The Assessment covered the four strands 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 strands.

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 97 test items (138 score points) covering all the 46 Basic Competency Descriptors of the four strands. These items were grouped into four sub-papers, each 40 minutes in duration and covered all four strands. 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(20)	15(20)	16(20)	15(20)	44(58)
Measures	8(12)	9(12)	8(11)	8(12)	27(37)
Shape and Space	7(10)	7(11)	7(12)	8(10)	20(29)
Data Handling	2(5)	2(4)	2(4)	2(5)	6(14)
Total	33(47)	33(47)	33(47)	33(47)	97(138)

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

Performance of Primary 3 Students Achieving Basic Competence in 2023

Primary 3 Number Strand

The performance of P.3 students was good in the Number Strand. They were able to demonstrate recognition of places. They were good at performing addition, subtraction and multiplication of whole numbers. Students in general were able to solve problems involving four arithmetic operations and demonstrate working steps clearly in presenting their solutions. They understood the basic concepts of fractions and were able to compare the magnitude of fractions. Students were able to perform subtraction of fractions with the same denominator that are illustrated by diagrams. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

5-digit Numbers

- Students' performance was good in demonstrating recognition of places (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 'seventy thousand and five hundred' as '7 005' or '7 500'.

Q3/M1	
用阿拉伯數字寫出「七萬零五百」。	答案： <u>7005</u> Answer: <u>7500</u>

- Students could generally order or write 5-digit numbers (e.g. Q3/M2). However, the minority of students failed to provide an odd number as the answer according to the specified criteria and mistakenly wrote an even number instead (e.g. Q2/M1).

Q2/M1	
寫出一個比 49 874 大，又比 50 139 小的奇數。 • •	答案： <u>49876</u> Answer: <u>50120</u>

Four Arithmetic Operations

- Students were good at performing addition of 3-digit 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, Q5/M3).
- The majority of students were capable of performing the multiplication up to 1 digit by 3 digits involving carrying (e.g. Q6/M1, Q6/M3; Q6/M2).
- In Q5/M4, most students were able to answer questions involving the commutative property of multiplication.
- Generally, students could perform division of 3-digit numbers by 1-digit number (e.g. Q7/M1, Q7/M2, Q6/M4). In Q7/M1, a few students mistakenly inserted a '0' in the wrong position of the quotient when performing division, resulting in the incorrect selection of option C.
- Students were good in performing mixed operations of addition and subtraction including small brackets (e.g. Q8/M1). A small proportion of students neglected the computational rule of doing 'multiplication before addition' in handling the mixed operations involving multiplication and addition, resulting in the incorrect selection of option D (e.g. Q8/M2). The performance of students was fair when solving mixed operations of multiplication and subtraction involving 3-digit numbers (e.g. Q8/M3).

Q8/M2	Q8/M3
$39 + 5 \times 6 =$ <p> <input type="radio"/> A. 30 <input type="radio"/> B. 44 <input type="radio"/> C. 69 <input checked="" type="radio"/> D. 264 </p>	$972 - 183 \times 3 = \underline{2367}$

- Students in general were able to solve simple application problems involving addition, subtraction, multiplication and mixed operations of multiplication and subtraction (e.g. Q9/M1, Q11/M1, Q12/M1, Q10/M2, Q9/M3).

- In Q10/M1, a small proportion of students incorrectly used subtraction to solve application problems involving division.

Q10/M1
<p>三年級共有學生 136 人，陳老師把學生平均 分為 8 組，每組有學生 <u>128</u> 人。</p>

- In Q10/M3, a small proportion of students misunderstood the questions or used incorrect methods of calculation, leading to incorrect answers.

Q10/M3
<p>麗欣製作一條手鏈需要 9 粒珠子。她有 282 粒珠子， 最多可製作 <u>32</u> 條手鏈。</p>
<p>麗欣製作一條手鏈需要 9 粒珠子。她有 282 粒珠子， 最多可製作 <u>291</u> 條手鏈。</p>

- In Q12/M3, the majority of students were able to demonstrate the correct solution.

Q12/M3	
$604 - 532 + 228$ $= 72 + 228$ $= 300$ <p>現有氣球 300 個。</p>	$(604 - 532) + 228$ $= 72 + 228$ $= 300$ <p>He have 300 balloons now.</p>

- In Q9/M2, a few students, although able to write the correct expressions, were unable to calculate the correct answers when they involved repeated subtraction of 3-digit numbers.

Q9/M2	
$317 - (118 + 124)$ $= 317 - 241$ $= 76$ <p>空置座位還有 76 個。</p>	$317 - 118 - 124$ $= 209 - 124$ $= 25$ <p>empty seats 25 are left</p>

- Although students could write the correct mathematical expressions, a few made mistakes in their calculation and got the wrong answers (e.g. Q13/M1, Q11/M2).

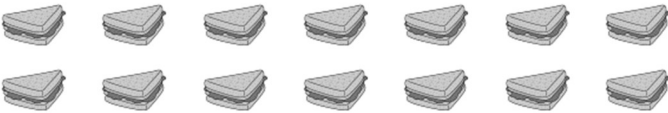
Q13/M1	Q11/M2
$(8 \times 4) + 9$ $= 32 + 9$ $= 51$ <p>∴ 共須付51元。</p>	$18 - 5 \times 2$ $= 18 - 10$ $= 18$ <p>2星期後還有牛奶18盒</p>

- A few students mixed up the ‘minuend’ with the ‘subtrahend’ when solving simple problems involving subtraction, though they still got the correct answers (e.g. Q9/M2).

Q9/M2	
$(118 + 124) - 317$ $= 317 - 242$ $= 75$ <p>∴ 空置座位還有75個。</p>	$(118 + 124) - 317$ $= 242 - 317$ $= 75$ <p>75 empty seats are left</p>

Fractions

- Most students were capable and demonstrated the recognition of fractions as parts of one whole (e.g. Q14/M1, Q13/M3). However, in Q13/M4, a small proportion of students might have been careless or did not understand the question and failed to write the correct answers.

Q13/M4	
<p>Kelly makes 14 sandwiches. $\frac{3}{7}$ of the whole are egg sandwiches. The rest are ham sandwiches.</p> 	
<p>(a) 雞蛋三文治有 <u>14</u> 件。</p> <p>(b) 火腿三文治佔全部的 $\frac{\boxed{4}}{\boxed{14}}$。</p>	<p>(a) There are <u>11</u> egg sandwiches.</p> <p>(b) $\frac{\boxed{6}}{\boxed{14}}$ of the whole are ham sandwiches.</p>

- Most students could recognize the relationship between fractions and 1 as the whole (e.g. Q13(b)/M2). However, a few students were not able to compare the value of $\frac{9}{9}$ and $\frac{5}{5}$ (e.g. Q15/M3).
- Most students were able to compare the magnitude of fractions with the same denominators (e.g. Q13(a)/M2). Students also performed quite well when comparing fractions with the same numerator (e.g. Q15/M1, Q14/M2).
- The performance of students was very good when performing subtraction of fractions with the same denominator that are illustrated by diagrams (e.g. Q15/M2).
- The performance of students was satisfactory when solving problems involving addition or subtraction of fractions with the same denominator that are illustrated by diagrams (e.g. Q16/M1, Q16/M3).

Q16/M1	Q16/M3
$\frac{6}{12} + \frac{5}{12}$ $= \frac{11}{12}$ <p>兩人共吃了朱古力 $\frac{11}{12}$ 盒。</p>	$\frac{9}{11} - \frac{6}{11}$ $= \frac{3}{11}$ <p>志言比文文多吃糖果 $\frac{3}{11}$ 包。</p>

- Although a few students could write the correct mathematical expressions, they made mistakes in their calculations and got the wrong answers (e.g. Q16/M1).

Q16/M1
$\frac{6}{12} + \frac{5}{12}$ $= \frac{10}{12}$ <p>They eat $\frac{10}{12}$ the box of chocolate altogether.</p>

- Though a few students could write the correct mathematical expressions, they mistakenly used the numerator as the answer. (e.g. Q16/M1, Q16/M3).

Q16/M1	Q16/M3
$\frac{6}{12} + \frac{5}{12}$ $= 11$ <p>∴ They eat 11 boxes of chocolate altogether.</p>	$\frac{9}{11} - \frac{6}{11}$ $= \frac{3}{11}$ <p>志言比文文多吃糖果 $\frac{3}{11}$ 包。</p>

Primary 3 Measures Strand

The performance of P.3 students in the Measures Strand was good. Generally, students were able to identify the money in circulation in Hong Kong and read price tags. They were capable of measuring and comparing the length, weight and capacity of objects. They were capable of choosing appropriate measuring tools as well. The majority of students were able to tell the time from an analog clock and a digital clock, give the dates and days of a week and use the '24-hour time'. The performance of students was quite weak in demonstrate recognition of the use of money in daily life. In selecting appropriate units to record the length and weight of objects, the performance of students was fair. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

Money

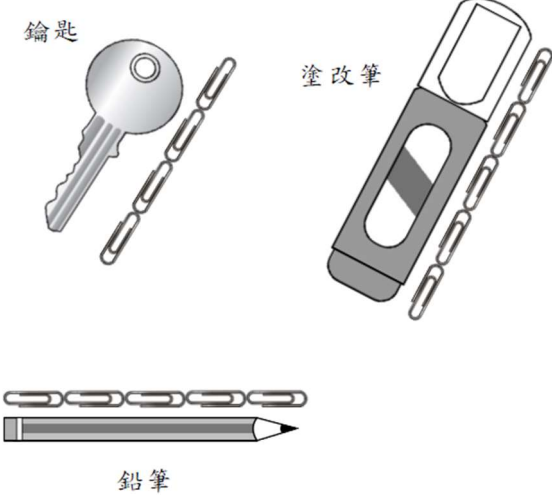
- Most students could identify the money in circulation in Hong Kong (e.g. Q18/M1).
- The majority of students were able to read price tags (e.g. Q17(a)/M1, Q17(a)/M3). A few students mistakenly interpreted the "10" in "27.10" as 1 dollar and incorrectly answered as "28 dollars 0 cents" (e.g. Q17(a)/M1).

Q17(a)/M1
(a) 一盒顏色筆的售價是 <u>28</u> 元 <u>0</u> 角。

- There was room for improvement in demonstrating the understanding of the use of money in daily life (e.g. Q17(b)/M3).

Length and Distance

- Most students could directly compare the length of objects (e.g. Q18/M3). However, a small proportion of students were unable to compare the length of different objects using improvised units (e.g. Q17/M2).

Q17/M2	
	<p>比較上圖鉛筆、鑰匙和塗改筆的長度。</p> <p>最長的是 * <u>鉛筆</u> / 鑰匙 / 塗改筆。</p> <p>(*圈出答案)</p>

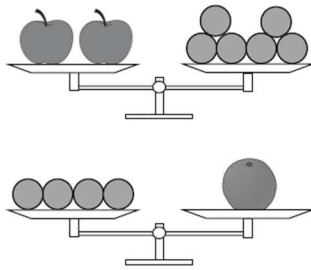








- A small proportion of students were not able to use the finger span as an ‘ever-ready ruler’ for measuring the length (e.g. Q20/M1).
- The majority of students were capable of using a ruler to measure the length of an object (e.g. Q19/M1).
- The majority of students were capable of using ‘kilometre’ to represent and compare distance (e.g. Q17/M4).
- The majority of students were able to use a suitable unit for recording the distance between two places (e.g. Q23/M3).
- Some students did not have a clear concept of ‘millimetre’ (mm) and ‘metre’ (m) (e.g. Q21(a)/M1, Q22(b)/M2).

Q21(b)/M1	Q22(b)/M2
<p>(a) The thickness of a primary mathematics book is about 8 <u>cm</u> .</p>	<p>(b) 一支街燈的高度約是 6 <u>cm</u> 。</p>

- The performance of students was very good in measuring the length of object with an appropriate tool (e.g. Q19/M3).

Weight

- The majority of students were able to compare the weight of objects directly (e.g. Q20/M2). However, some students encountered difficulties when comparing the weight of objects using improvised units (e.g. Q24/M3).

Q24/M3	
	<p>細閱上圖，以下哪一項是正確的？</p> <p><input checked="" type="radio"/> A.  比  重。</p> <p><input type="radio"/> B.  比  重。</p> <p><input type="radio"/> C.  和  的重量相等。</p> <p><input type="radio"/> D. 無法比較  和  的重量。</p>

- The majority of students were capable of measuring the weight of objects using ‘gram’ (g) or ‘kilogram’ (kg) (e.g. Q23(a)/M1, Q22/M3). They were good at comparing the weight of objects (e.g. Q23(b)/M1).
- The performance of students was fair in recording the weight of object using an appropriate unit (Q21(b)/M1). However, a few students confused the unit of weight with that of length (e.g. Q22(a)/M2).
- The majority of students were able to measure the weight of an object using the appropriate tool (e.g. Q18/M2).

Capacity

- Most students were able to measure and compare the capacity of containers using improvised units (e.g. Q23/M4).
- The majority of students were able to measure the capacity of containers using ‘millilitre’ (mL) (e.g. Q24/M1, Q19/M2).
- The majority of students were able to use appropriate tool for measuring the capacity of containers (e.g. Q24/M2).

- A small proportion of students were not able to record the capacity of containers using an appropriate unit (e.g. Q19/M4).

Q19/M4	
<p>在橫線上填上適當的度量單位。</p> <p>一個水桶的容量約是 5 <u>ml</u> 。</p>	<p>Fill in the following blank with a suitable unit.</p> <p>The capacity of a bucket is about 5 <u>ml</u> .</p>

Time

- The majority of students were able to write the correct days of a week and give the correct number of days under specific conditions (e.g. Q21(a)/M3, Q21(a)/M4).
- Some students were unable to write the correct date of an activity based on specific conditions. Some students may have misunderstood the concept of “It lasts for 5 days” (e.g. Q21(b)/M3).

Q21(b)/M3						
<p>根據下面一月份的月曆，回答下列各題。</p>						
一月						
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	31				
<p>(b) 由一月二十一日起一連五天是學校假期，</p> <p>假期的最後一天是 <u>一</u> 月 <u>二十四</u> 日。</p>						

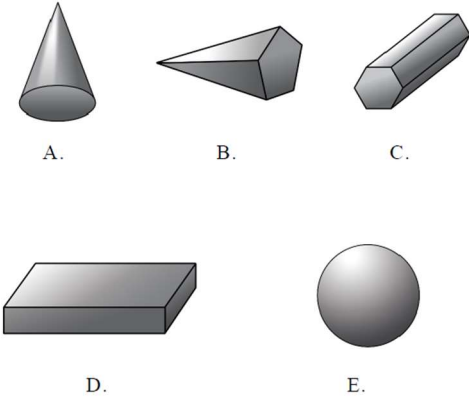
- The majority of students were capable of telling time from an analog clock (e.g. Q22(a)/M1) and a digital clock (e.g. Q21(a)/M2).
- The majority of students were able to record the duration of time for activities using ‘hours’ or ‘minutes’ (e.g. Q22(b)/M1, Q21(b)/M2).
- The majority of students were able to apply the ‘24-hour time’ (e.g. Q22/M4).

Primary 3 Shape and Space Strand

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

3-D Shapes

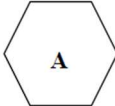
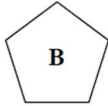

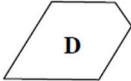
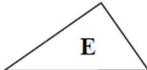
- The majority of students were capable of identifying cylinders and spheres intuitively (e.g. Q25/M1, Q25(b)/M3).
- Almost half of the students easily confused 2-D shapes with 3-D shapes when the base of a prism is a rectangle (e.g. Q27/M4).
- In Q26(a)/M1, half of the students failed to identify prisms intuitively and they confused prisms with pyramids. Additionally, a few students were unable to identify all of the prisms. In Q26(b)/M1, a small proportion of students mistook spheres for cones.

Q26/M1	
<p>觀察下列的立體圖形，寫出所有代表答案的英文字母。</p>  <p>A. B. C.</p> <p>D. E.</p>	<p>(a) 角柱: <u>B, C</u></p> <p>(b) 圓錐: <u>A</u></p> <p>(a) 角柱: <u>D</u></p> <p>(b) 圓錐: <u>B</u></p> <p>(a) Prism(s): <u>D, B, C</u></p> <p>(b) Cone(s): <u>A, E</u></p>

- In Q25(a)/M3, half of the students failed to identify pyramids intuitively, some students confused pyramids with prisms.

2-D Shapes





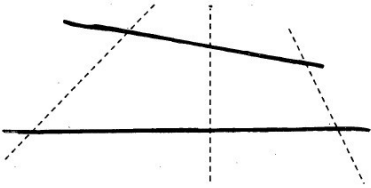
- Most students could identify 2-D shapes including triangles, quadrilaterals, squares, hexagons and circles intuitively (e.g. Q27(a)/M1, Q28(a)(b)/M2, Q26(a)(b)/M3). However, in Q27(b)/M1, a few students were unable to identify all of the pentagons.

Q27(b)/M1
<p>Study the 2-D shapes below. Write down all the letters for the answers.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>A</p> </div> <div style="text-align: center;">  <p>B</p> </div> <div style="text-align: center;">  <p>C</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>D</p> </div> <div style="text-align: center;">  <p>E</p> </div> </div> <p style="text-align: center; margin-top: 20px;">(b) Pentagon(s): <u> D </u></p>

- Students were good at identifying right-angled triangles, isosceles triangles and equilateral triangles intuitively (e.g. Q29/M1, Q27/M3, Q26/M4).

Lines

- Most students were capable of identifying parallel lines (e.g. Q30/M1).
- The performance of students was very good in identifying straight lines and curves intuitively (e.g. Q30(a)(b)/M3).
- Almost half of the students were unable to identify perpendicular lines (e.g. Q28/M1). Some students failed to draw perpendicular lines (e.g. Q29/M4).

Q28/M1	Q29/M4
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>A.</p> </div> <div style="text-align: center;">  <p>B.</p> </div> <div style="text-align: center;">  <p>C.</p> </div> <div style="text-align: center;">  <p>D.</p> </div> </div> <p>List the figure(s) formed by perpendicular lines.</p> <p>Answer: <u> B </u></p>	<p>在下圖中，沿着虛線畫出一對垂直線。</p> 

Angles

- The majority of students were able to identify right angles (e.g. Q29(a)/M2). However, their performance in identifying obtuse angles was fair (e.g. Q29(b)/M2).
- The performance of students in comparing the sizes of angles was good (e.g. Q30/M2).

Directions and Positions

- Most students were able to describe the relative positions of objects using the term “above” (e.g. Q30/M4).
- Most students were capable of demonstrating recognition of the four directions: east, south, west and north (e.g. Q31/M1, Q31(a)/M3). However, some students were not able to judge the correct direction relative to a reference point (e.g. Q31(b)/M3).

Q31(b)/M3

(b) 游泳池在籃球場的

* 東方 / 南方 / 西方 / 北方。

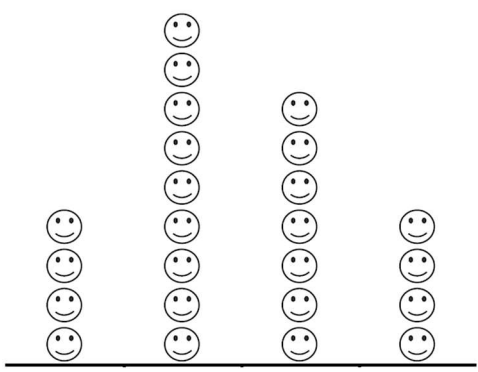
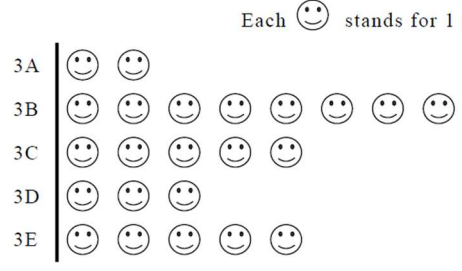
(* 圈出答案)

Primary 3 Data Handling Strand

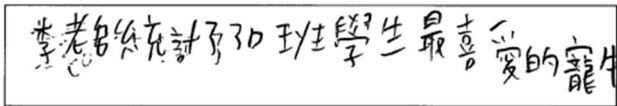
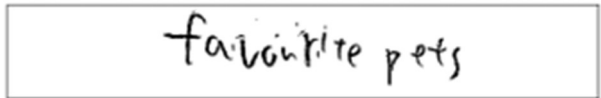
The performance of P.3 students was good in the Data Handling Strand. Students were capable of reading pictograms and bar charts. They could interpret the information given in statistical graphs to answer straightforward questions. Many students were able to construct pictograms from tabulated data. However, some students were relatively weak in constructing bar charts. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

Pictograms

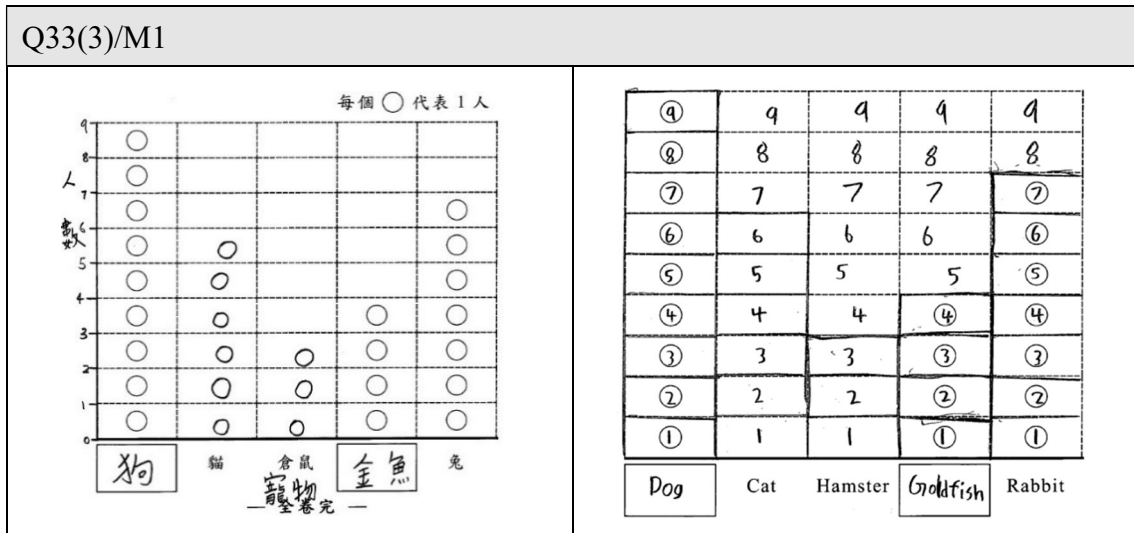
- Most students were good at reading pictograms with a one-to-one representation. They were able to read the data given in pictograms (e.g. Q32(a)/M2, Q32(a)/M3), then compare the data or carry out simple calculations in order to answer the questions (e.g. Q32(b)/M2, Q32(b)/M3).

Q32/M2	Q32/M3
<p style="text-align: center;">3A 班學生最喜愛的節日食品</p> <p style="text-align: center;">每個 ☺ 代表 1 人</p>  <p style="text-align: center;">湯圓 年糕 糉子 月餅</p> <p>(a) 最喜愛年糕的學生有 <u>9</u> 人。</p> <p>(b) 最喜愛湯圓和 <u>月餅</u> 的學生人數相同，各有 <u>4</u> 人。</p>	<p style="text-align: center;">Number of Pupils Joining Mathematics Competition in Each Primary Three Class</p> <p style="text-align: center;">Each ☺ stands for 1 pupil</p>  <p>(a) The number of pupils joining Mathematics competition in Class <u>3B</u> was the largest. There were <u>8</u> pupils.</p> <p>(b) The total number of Primary Three pupils joining Mathematics competition was <u>23</u>.</p>

- Most students were able to label the pictogram with the corresponding pet name (e.g. Q33(2)/M1).
- Students performed satisfactorily in constructing pictograms from tabular data (e.g. Q33(3)/M1).
- 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).

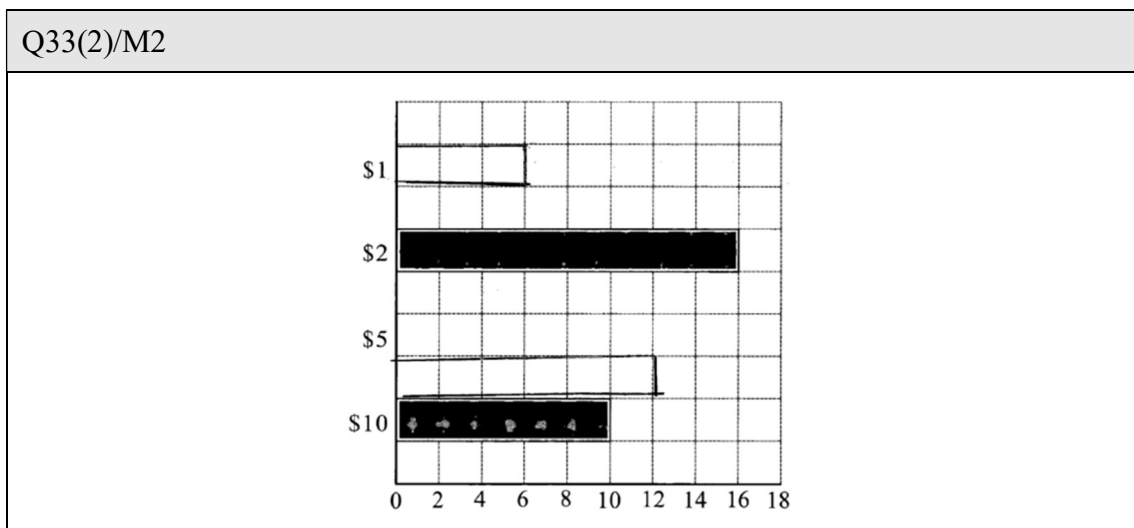
Q33(1)/M1
 

- 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(3)/M1).

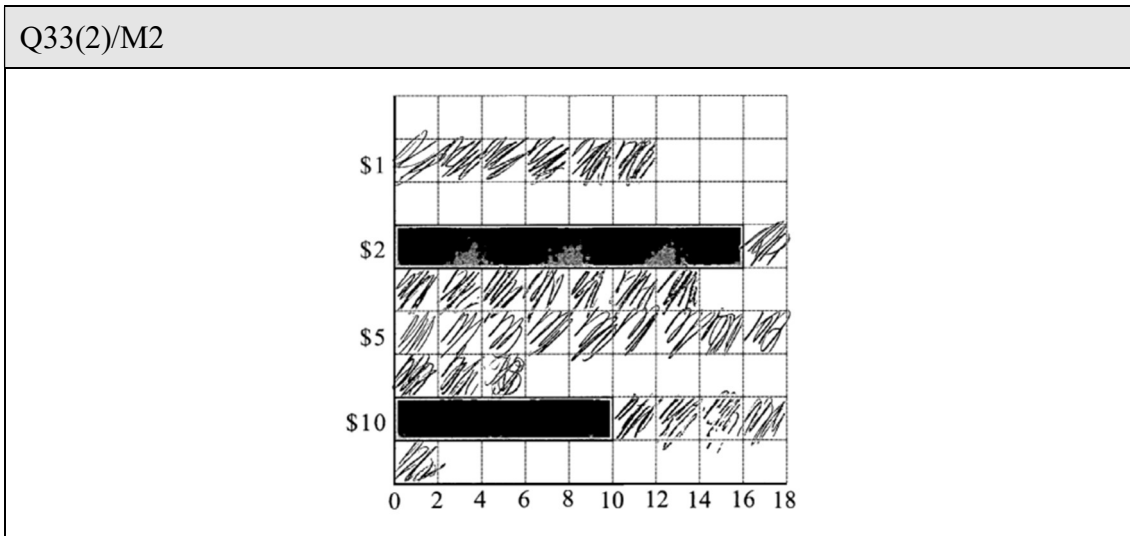


Bar Charts

- Most students were able to read bar charts with a one-to-five representation and read the data given in bar charts (e.g. Q32(a)/M1).
 - The majority of students were able to use the obtained data for comparisons and carry out simple calculations to answer the questions (e.g. Q32(b)/M1).
 - Many students were capable of providing a proper title for a bar charts. However, a few students still missed out the keywords in the title (e.g. Q33(1)/M2).
 - There was room for improvement in the students' performance in constructing bar charts.
- (a) A few students drew bars on the wrong positions or with inconsistent separations (e.g. Q32(2)/M2)



- (b) A few students failed to demonstrate an understanding of bar charts using one-to-two representation (e.g. Q33(2)/M2)



General Comments on Primary 3 Student Performances

- The performance of P.3 students in the Number Strand was good. Generally, students mastered the basic concepts of whole numbers and fractions as well as the computational skills of the four operations in Key Stage 1. Students in general were able to solve application problems and demonstrate working steps clearly in presenting their solutions. A small proportion of students mistook subtraction to solve application problems involving division. Students were good at solving problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.
- The performance of P.3 students was good in the Measures Strand. They were able to identify the money in circulation in Hong Kong, read price tags, read an analog clock and a digital clock, read the dates and days of a week. However, their performance was relatively weak in demonstrating recognition of the use of money in daily life, estimating the lengths of objects with finger span as “ever-ready rulers” and selecting appropriate units to record the length and weight of objects.
- P.3 students’ performance in the Shape & Space Strand was satisfactory. They were capable of recognizing straight lines, curves, parallel lines and 2-D shapes. They were also good at comparing the size of angles and the four directions. However, a considerable number of students encountered difficulties in identifying 3-D shapes, obtuse angles and perpendicular lines.

- The performance of P.3 students was good in the Data Handling Strand. They were able to read pictograms and bar charts interpret the data given to answer simple questions. The performance of students was quite good in constructing pictograms from tabular data. However, there was still room for improvement for some students in constructing bar charts.

Good Performance of Primary 3 Students in 2023

- 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. Q11/M2, Q12/M3).

Q11/M2	Q12/M3
$18 - (5 \times 2)$ $= 18 - 10$ $= 8$ <p>2星期後還有8盒。</p>	$604 - 532 + 228$ $= 72 + 228$ $= 300$ <p>He have 300 balloons now.</p>

- Students with good performance had a thorough conceptual understanding of the fractions. They could recognize the relationship between fractions and 1 as a whole and compare the magnitude of fractions with same denominators or same numerators, and correctly present their solution in solving problems involving fractions (e.g. Q16/M1, Q16/M3).

Q16/M1	Q16/M3
$\frac{6}{12} + \frac{5}{12}$ $= \frac{11}{12}$ <p>2人吃了朱古力 $\frac{11}{12}$ 盒。</p>	$\frac{9}{11} - \frac{6}{11}$ $= \frac{3}{11}$ <p>Billy eats $\frac{3}{11}$ more of a bag of candies than Helen.</p>

- Students with good performance were able to identify the money in circulation in Hong Kong, read price tags, and demonstrate recognition of the use of money in daily life.
- Students with good performance were capable of recording the length, weight and capacity of objects with appropriate units. They could also compare the weights of objects in improvised units.

- Students with good performance were capable of identifying different 3-D shapes and 2-D shapes.
- Students with good performance were capable of identifying parallel lines and perpendicular lines (e.g. Q29/M4). They were able to identify right angles, acute angles and obtuse angles (e.g. Q29/M2). They could accurately identify the four directions including the ‘north’ direction pointing to the right of the map.

Q29/M4	Q29/M2
	<p>(a) 列出有直角的圖。 答案: A, C _____</p> <p>(b) 列出有鈍角的圖。 答案: B _____</p>

- Students with good performance were able to read pictograms and bar charts. They could use the data provided to make comparisons or perform simple calculations to answer the questions. They could construct pictograms and bar charts by referring to the given raw data and provide a proper title (e.g. Q33/M1, Q33/M2).

Q33/M1	Q33/M2																																																
<p>The Favourite Pets of P.3D Pupils</p> <p>(Title)</p> <p>Each ○ stands for 1 pupil</p> <table border="1"> <tr><td>○</td><td></td><td></td><td></td><td></td></tr> <tr><td>○</td><td></td><td></td><td></td><td></td></tr> <tr><td>○</td><td></td><td></td><td></td><td>○</td></tr> <tr><td>○</td><td>○</td><td></td><td></td><td>○</td></tr> <tr><td>○</td><td>○</td><td></td><td></td><td>○</td></tr> <tr><td>○</td><td>○</td><td></td><td>○</td><td>○</td></tr> <tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr> <tr><td>○</td><td>○</td><td>○</td><td>○</td><td>○</td></tr> </table> <p>Dog Cat Hamster Goldfish Rabbit</p>	○					○					○				○	○	○			○	○	○			○	○	○		○	○	○	○	○	○	○	○	○	○	○	○	<p>根據統計結果，用鉛筆完成以下的棒形圖，並加上標題。</p> <p>錢箱裏各種硬幣的數量</p> <p>(標題)</p> <table border="1"> <tr><td>一元</td><td>6</td></tr> <tr><td>二元</td><td>16</td></tr> <tr><td>五元</td><td>12</td></tr> <tr><td>十元</td><td>10</td></tr> </table> <p>硬幣</p> <p>0 2 4 6 8 10 12 14 16 18</p>	一元	6	二元	16	五元	12	十元	10
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Overview of Primary 3 Student Performances in Mathematics in 2018, 2019 and 2023

The percentages of P.3 students achieving Mathematics Basic Competency in 2018, 2019 and 2023 are provided below.

Table 8.2 Percentages of P.3 Students Achieving Mathematics Basic Competency in 2018, 2019 and 2023**

Year	% of Students Achieving Mathematics Basic Competency
2018	88.0
2019	87.7
2023	86.5

** Due to the volatility of the COVID-19 epidemic, the TSA 2020, 2021 and 2022 were suspended and no data was provided.

A comparison of the strengths and weaknesses of P.3 students in 2018, 2019 and 2023 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 strands for these years.

Table 8.3 Overview of P.3 Student Performances in Mathematics in 2018, 2019 and 2023

Year Number	2018	2019	2023	Remarks
Strengths	<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 were able to demonstrate recognition of places. Students were good at addition, subtraction and multiplication of whole numbers. 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 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. 	<ul style="list-style-type: none"> A small proportion of students incorrectly used subtraction to solve application problems involving division. A few students were not able to write the correct mathematical expressions in solving application problems. 	

Year Measures	2018	2019	2023	Remarks
Strengths	<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"> • Students were able to identify the money in circulation in Hong Kong and read price tags. • Students performed well in telling the time on an analog clock or a digital clock. • Students were capable of measuring and comparing the length and weight of objects as well as the capacity of containers. • Students were able to choose appropriate tools to measure the length and weight of objects, and the capacity of containers. 	<ul style="list-style-type: none"> • Demonstrate the examples of the use of money in daily life. • Show appropriate units of measurement for recording the length, weight and capacity.
Weaknesses	<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. 	<ul style="list-style-type: none"> • Students were quite weak in demonstrating the understanding of the use of money in daily life. • There was room for improvement in recording the length and weight of objects with appropriate units. 	

Shape and Space Year	2018	2019	2023	Remarks
Strengths	<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"> Students were able to identify standard 2-D shapes. Students were capable of identifying different types of triangles intuitively. The performance of students was good in identifying straight lines, curves or parallel lines. Students were able to identify acute angles, right angles and compare the size of angles. Students were capable of demonstrating recognition of the four directions. 	<ul style="list-style-type: none"> Demonstrate different examples of 3-D shapes. Show examples illustrating different forms of perpendicular lines.
Weaknesses	<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. 	<ul style="list-style-type: none"> Students' performance was relatively weak in identifying prisms. Students' performance was relatively weak in identifying perpendicular lines. 	

Year Data Handling	2018	2019	2023	Remarks
Strengths	<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"> Students were capable of reading pictograms and bar charts. They could interpret the information given in statistical graphs to answer straightforward questions. Students were able to construct pictograms from tabular data. 	<ul style="list-style-type: none"> Let the students understand the key points in constructing bar chart.
Weaknesses	<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. 	<ul style="list-style-type: none"> There was room for improvement in the students' performance in constructing bar charts. 	