

Results of Primary 3 Mathematics in Territory-wide System Assessment 2024

The percentage of Primary 3 students achieving Mathematics Basic Competency in 2024 is 85.3%.

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 (136 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)	16(21)	15(20)	17(21)	44(56)
Measures	8(12)	7(11)	10(12)	8(11)	28(38)
Shape and Space	7(10)	8(11)	6(10)	6(10)	19(28)
Data Handling	2(5)	2(4)	2(5)	2(5)	6(14)
Total	33(47)	33(47)	33(47)	33(47)	97(136)

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

Performance of Primary 3 Students Achieving Basic Competence in 2024

Primary 3 Number Strand

The performance of P.3 students was good in the Number Strand. They were able to demonstrate the recognition of places, and most students could represent whole numbers using Arabic numerals, though a few made errors when writing five-digit numbers. Students were able to perform addition, subtraction and multiplication of whole numbers and were proficient in solving basic application problems. A small proportion of students struggled with more complex mathematical expressions, particularly in division and mixed-operation application problems. They understood basic concepts of fractions, compare the magnitude of fractions with the same numerator or denominator, and perform addition or subtraction. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

5-digit Numbers

- Students' performance was very good in demonstrating recognition of places (e.g. Q1/M1, Q1/M2) and the values represented by the digits (e.g. Q3/M3).
- The majority of students were able to express a whole number in Arabic numerals (e.g. Q2/M1). However, a few students wrongly expressed 'thirty thousand and forty' as '3 040' or '3 400'.

Q2/M1	
用 <u>阿拉伯</u> 數字寫出「三萬零四十」。	
答案： <u>4040</u>	Answer: <u>3400</u>
答案： <u>3040</u>	Answer: <u>3000+40</u>

- Students demonstrated good performance in ordering numbers up to 5-digit (e.g. Q3/M1). However, a small proportion of students incorrectly provided an odd number instead of an even number as required when writing a 5-digit number (e.g. Q4/M2).

Four Arithmetic Operations

- Students demonstrated excellent performance in performing addition of 3-digit numbers including carrying (e.g. Q5/M2). They were also good at performing repeated addition of 3-digit numbers (e.g. Q4/M1, Q3/M4).
- The majority of students were able to perform subtraction of 3-digit numbers, involving decomposition and repeated subtraction (e.g. Q6/M2, Q5/M3). In Q5/M1, a small proportion of students incorrectly performed consecutive subtraction by first calculating $246 - 46$, then subtracting the result from 560, which led them to select the incorrect option D.
- The majority of students were capable of performing the multiplication up to 1-digit numbers by 3-digit numbers involving carrying (e.g. Q7/M2, Q6/M3, Q5/M4). Most students were able to answer questions involving the commutative property of multiplication (e.g. Q6/M1).
- Many students were able to perform division of 3-digit numbers by 1-digit numbers (e.g. Q7/M1, Q7/M3). In Q8/M2, a small number of students disregarded the remainder after the calculation.
- Students were good at performing mixed operations of addition and subtraction including small brackets (e.g. Q8/M3). A few students neglected the computational rule of doing ‘multiplication before addition’ in handling the mixed operations of multiplication and addition (e.g. Q9/M2).
- The performance of students was fair when solving mixed operations of multiplication and subtraction (e.g. Q8/M1). However, a few students were unable to grasp the computational rule of doing ‘multiplication before subtraction’ or made calculation errors, resulting in incorrect answers.

Q8/M1

$$28 - 6 \times 4 = \underline{24} \quad 28 - 6 \times 4 = \underline{88}$$

- The majority of students were able to solve simple application problems involving subtraction, multiplication, and mixed operations of multiplication and subtraction (e.g. Q11/M2, Q13/M1, Q10/M3, Q11/M1). Their performance in solving simple application problems involving addition and division was quite good (e.g. Q9/M1, Q10/M1).
- In Q11/M1, a few students incorrectly used multiplication to solve application problems involving mixed operations of multiplication and subtraction.

Q11/M1
<p>每盒原子筆有 8 支。陳老師買了 5 盒原子筆， 當中有 16 支是紅色，其餘的都是藍色， 藍色的有 <u>640</u> 支。</p>

- In Q10/M3, the minority of students misunderstood the questions or made computational mistakes, leading to incorrect answers.

Q10/M3
<p>課室裏有 6 個書架，每個書架可放 28 本圖書， 共可放 <u>148</u> 本圖書。</p>
<p>There are 6 bookshelves in the classroom. Each bookshelf can hold 28 books. They can hold <u>32</u> books altogether.</p>

- In Q10/M4, the minority of students were unable to understand the meaning of the quotient and remainder in division application problems, leading to incorrect answers.
- In Q12/M1, the majority of students were able to demonstrate the correct solutions. However, some students did not fully understand the meaning of 'buying two toys gets 80 dollars off', resulting in their failure to write the correct mathematical expression.

Q12/M1	
$389 + 509$ $= 898$ <p>他應付 898 元。</p>	$389 - 80 + 509 - 80$ $= 309 + 429$ $= 738$ <p>∴ 他應找回 738 元</p>

- In Q13/M2, many students were able to write the correct mathematical expressions and demonstrate the correct solutions. However, a few students were unable to handle the more complex scenario and failed to write the correct mathematical expressions. Additionally, a few students only calculated the number of lychees Christy ate.

Q13/M2	
$(4 \times 3) + 12$ $= 4 + 12$ $= 16$ <p>兩人共吃了荔枝 16 粒。</p>	4×3 $= 12$ <p>They eat 12 lychees altogether.</p>

- In Q9/M3, although students could write the correct mathematical expressions, a few made mistakes in their calculations and got the wrong answers. Furthermore, due to a lack of understanding of the problem, some students were unable to write the correct mathematical expressions.

Q9/M3	
$215 + (130 + 258)$ $= 215 + 380$ $= 595$ <p>米糖果店原有米糖果 595 包。</p>	$130 + 258 - 215$ $= 388 - 215$ $= 173$ <p>There were 173 candies at first</p>

Fractions

- Most students were able to demonstrate the recognition of fractions as parts of one whole (e.g. Q14/M1, Q12/M3). However, when the questions involved more complex scenarios (e.g. Q14/M2), some students might have been careless or did not understand the questions and failed to write the correct answers.
- Most students could recognize the relationship between fractions and 1 as the whole (e.g. Q13(b)/M3). Nevertheless, a small proportion of students were unable to compare 8 and $\frac{8}{8}$, with a significant number mistakenly believing that 8 is equal to $\frac{8}{8}$ (e.g. Q15/M1).
- Students were good at comparing the magnitude of fractions with the same denominator (e.g. Q13(a)/M3, Q14/M3). They also performed quite well in comparing fractions with the same numerator (e.g. Q15/M2).

- The performance of students was very good when performing addition of fractions with the same denominator that are illustrated by diagrams (e.g. Q15/M3).
- The performance of students was good when solving application problems involving addition or subtraction of fractions with the same denominator that are illustrated by diagrams (e.g. Q16/M1, Q17/M4).

Q16/M1	Q17/M4
$\frac{3}{6} + \frac{2}{6}$ $= \frac{5}{6}$ <p>∴ 共吃了蛋糕 $\frac{5}{6}$ 個</p>	$\frac{8}{9} - \frac{3}{9}$ $= \frac{5}{9}$ <p>文安有朱古力 $\frac{5}{9}$ 盒。</p>

- A few students were unable to understand the concept of fractions or did not understand the question, leading to incorrect mathematical expressions. (e.g. Q16/M1, Q17/M4).

Q16/M1	Q17/M4
$\frac{6}{6} - \frac{3}{6} - \frac{2}{6}$ $= \frac{3}{6} - \frac{2}{6}$ $= \frac{1}{6}$ <p>∴ 兩人共吃了蛋糕 $\frac{1}{6}$ 個。</p>	$\frac{8}{9} + \frac{3}{9}$ $= \frac{5}{9}$ <p>文安有朱古力 $\frac{5}{9}$ 盒。</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, read price tags, and correctly select images of currency to make payments. They were capable of measuring and comparing the length, weight, and capacity of objects, and they could choose appropriate tools for measurement. The majority of students were able to read and convert time between the '24-hour time' and '12-hour time', as well as accurately tell time from both analog and digital clocks. Students showed a fair performance in using correct units to record and weight of objects. Further comments on students' performance are provided below, with examples from different sub-papers quoted in brackets.


Money

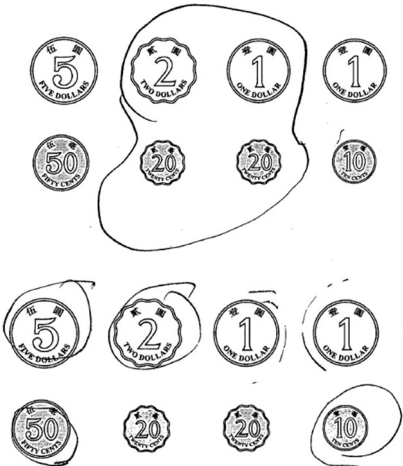
- Most students could identify the money in circulation in Hong Kong (e.g. Q19/M4).
- Most students were able to read price tags (e.g. Q17(a)/M1, Q17(a)/M2).
- Students were good at selecting the currency corresponding to the amount to be paid (e.g. Q17(b)/M2). However, there was still room for improvement in students' performance when handling more complex operations involving money in daily life. (e.g. Q17(b)/M1).

Q17(b)/M1



一支雪糕的售價是 _____ 元 _____ 角。

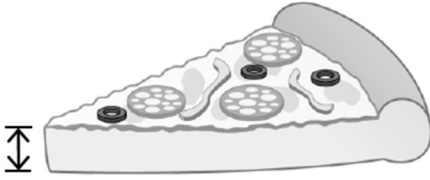
沛然付  購買一支雪糕。圈出店員須找回的金額。



Length and Distance

- Most students could compare the length of objects directly (e.g. Q17/M3). However, a small proportion of students were unable to compare the length of objects using improvised units (e.g. Q18/M2).
- Students performed well in measuring the length of an object using a ruler (e.g. Q20/M4).
- Most students were capable of using the foot span as an 'ever-ready ruler' for measuring the length of a football field (e.g. Q18/M3).
- The majority of students were capable of using 'kilometre' to represent and compare distance (e.g. Q18/M1).

- The majority of students were able to record the thickness of a pizza slice in an appropriate unit (e.g. Q20/M3).

Q20/M3	
	<p>一塊薄餅的厚度約是 10 <u>mm</u> 。</p> <p>The thickness of a slice of pizza is about 10 <u>mm</u> .</p>

- Many students were able to record the length of objects in an appropriate unit. However, some of them confused the unit of length with that of weight. Additionally, a few students did not have a clear concept of ‘centimetre’ (cm) and ‘millimetre’ (mm) (e.g. Q20(a)/M2, Q22(b)/M4).

Q20(a)/M2	Q22(b)/M4
<p>一輛貨車的長度約是 6 <u>Kg</u> 。</p> <p>The length of a lorry is about 6 <u>cm</u> .</p>	<p>一支蠟筆的長度約是 10 <u>g</u> 。</p> <p>The length of a crayon is about 10 <u>mm</u> .</p>

- The performance of students was very good in measuring the length of objects with an appropriate tool (e.g. Q21/M4).

Weight

- The majority of students were able to compare the weight of objects directly (e.g. Q22/M3). However, students demonstrated fair performance when comparing the weight of objects using improvised units (e.g. Q24/M4).
- The majority of students were capable of measuring the weight of objects using ‘gram’ (g) or ‘kilogram’ (kg) (e.g. Q22(a)/M2, Q24/M3). Their performance in comparing the weight of objects was satisfactory (e.g. Q22(b)/M2).

- The performance of students was fair in recording the weight of objects in an appropriate unit (e.g. Q20(b)/M2). A few students confused the units of length, capacity and weight (e.g. Q20(b)/M2, Q22(a)/M4).

Q20(b)/M2	Q22(a)/M4
<p>一架滑板車的重量約是 5 <u>g</u> 。</p> <p>The weight of a scooter is about 5 <u>cm</u> .</p> <p>The weight of a scooter is about 5 <u>L</u> .</p>	<p>一部手提風扇的重量約是 200 <u>mm</u> 。</p> <p>The weight of a portable handheld fan is about 200 <u>mm</u> .</p> <p>The weight of a portable handheld fan is about 200 <u>kg</u> .</p>

- Students showed good performance in measuring the weight of an objects using the appropriate tool (e.g. Q19/M1).

Capacity

- The majority of students were able to compare the capacity of containers using improvised units (e.g. Q24/M1) and were also able to measure the capacity of containers in ‘millilitre’ (mL) (e.g. Q21/M2, Q23/M3).
- Most students were able to measure the capacity of containers with appropriate tool (e.g. Q19/M3).
- Students’ performance in recording the capacity of containers in an appropriate unit was satisfactory (e.g. Q20/M1).

Time

- Most students were able to write the correct days of a week (e.g. Q22(a)/M1). They showed good performance in giving the correct number of days and dates under specific conditions (e.g. Q23(b)/M2, Q23(a)/M2).

- A small proportion of students were unable to calculate the total number of days of the study tour from the given start and end dates (e.g. Q22(b)/M1).

Q22(b)/M1

八月						
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

(b) 遊學團由八月七日至八月十日舉行，共舉行了 3 天。





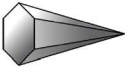
- The majority of students were able to tell time from an analog clock (e.g. Q21(a)/M3).
- Students performed well in telling time from a digital clock (e.g. Q21(a)/M1).
- Most students were able to record the duration of activities in hours using a digital clock (e.g. Q21(b)/M1). Students showed good performance when measuring duration of activities in minutes using an analog clock (e.g. Q21(b)/M3).
- The majority of students were able to understand the time presented in ‘24-hour time’ in the question, and write it in the ‘12-hour time’ (e.g. Q23/M1).

Primary 3 Shape and Space Strand

Students’ performance in the Shape and Space Strand was good. The majority of students were able to identify 2-D shapes such as triangles, trapeziums, pentagons, hexagons and circles, as well as straight lines, curves, parallel lines and perpendicular lines. They were capable of identifying right-angled triangles, isosceles triangles, and equilateral triangles. However, the performance of students was fair in identifying pyramids and acute angles. Further comments on students’ performance are provided below with examples from different sub-papers quoted in brackets.





3-D Shapes

- Students showed a good performance in identifying spheres intuitively (e.g. Q27(a)/M1).
- A few students were unable to identify all pyramids intuitively, and their judgment was easily influenced by the different orientations of the 3-D shapes (e.g. Q27(b)/M1).
- In Q26(a)/M3, almost half of the students failed to identify prisms intuitively and they confused prisms with cylinders. Additionally, a few students were unable to identify all of the prisms. In Q26(b)/M3, a small proportion of students mistook cylinders for cones.

Q26/M3	
 <p>A.</p>  <p>B.</p>  <p>C.</p>  <p>D.</p>  <p>E.</p>	<p>列出： (a) 角柱： <u>E, C</u> (b) 圓錐： <u>D, B</u></p> <p>列出： (a) 角柱： <u>A, B, C</u> (b) 圓錐： <u>D, E</u></p> <p>列出： (a) 角柱： <u>C</u> (b) 圓錐： <u>D</u></p> <p>列出： (a) 角柱： <u>B</u> (b) 圓錐： <u>D</u></p>

2-D Shapes

- Most students could identify 2-D shapes including triangles, trapeziums, pentagons, hexagons and circles intuitively (e.g. Q28(a)/M4, Q26/M1, Q28(a)/M1, Q27/M3). However, a small proportion of students had difficulty in identifying parallelograms intuitively, with a few of them mistaking trapeziums for parallelograms (e.g. Q28(b)/M1).

Q28(b)/M1	
 <p>A</p>  <p>B</p>  <p>C</p>  <p>D</p>	<p>列出：</p> <p>(a) 五邊形： <u>C</u></p> <p>(b) 平行四邊形： <u>A</u></p>

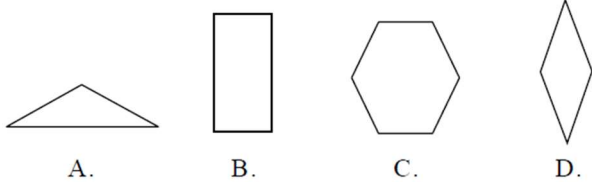
- Students were good at identifying right-angled triangles, isosceles triangles and equilateral triangles intuitively (e.g. Q29/M1, Q26/M4).

Lines

- Most students were able to identify and draw a pair of parallel lines (e.g. Q26/M2, Q30/M1).
- The performance of students was satisfactory in identifying straight lines and curves intuitively (e.g. Q28/M2).
- Many students were able to identify perpendicular lines (e.g. Q29/M4).

Angles

- The majority of students were able to identify right angles (e.g. Q30(a)/M3). However, students were unable to identify all the figures with acute angles (e.g. Q30(b)/M3).

Q30(b)/M3	
 <p>A. B. C. D.</p>	<p>(b) 列出有銳角的圖。</p> <p>答案： <u> D </u></p> <p>(b) 列出有銳角的圖。</p> <p>答案： <u> A </u></p>

- The performance of students in comparing the size of angles was good (e.g. Q29/M2).

Directions and Positions

- Most students were able to understand the meaning of ‘between’ and describe the relative positions of objects (e.g. Q30/M2).
- The majority of students were capable of demonstrating recognition of the four directions: east, south, west and north (e.g. Q31(a)/M1, Q31/M2). Their performance was also satisfactory when the 'north' direction in the diagram was not pointing upwards (e.g. Q31/M2).

- A small proportion of students were not able to judge the correct direction relative to a reference point (e.g. Q31(b)/M1).

Q31(b)/M1	
	<p>(b) 巴士站在商店的</p> <p>* 東方 / 南方 / 西方 / 北方 。</p> <p>(b) Bus Stop is to the</p> <p>* east / south / west / north of Toy Shop.</p>

Primary 3 Data Handling Strand

The performance of P.3 students was good in the Data Handling Strand. Students were generally able to read data from pictograms and perform simple calculations to answer questions, as well as correctly label pictograms. They showed satisfactory performance in constructing pictograms from tabulated data. Students performed well in constructing bar charts; however, a few of them were unable to draw the bars with the correct length or position. Further comments on students' performance are provided below with examples from different sub-papers quoted in brackets.

Pictograms

- Most students were able to read the data given in pictograms (e.g. Q32(a)/M1), and use the data to perform simple calculations to solve problems (e.g. Q32(b)/M1).
- Most students were able to add the corresponding fruit names to the pictograms (e.g. Q33(2)/M3).
- Students performed satisfactorily in constructing pictograms from tabular data (e.g. Q33(2)/M2, Q33(3)/M3).

- 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(1)/M3).

Q33(1)/M2

完成以下的象形圖

美兒統計了家裏不同顏色裙子的數量

- A very small proportion of students mistakenly used bar charts to represent data in pictograms, and a few others unnecessarily added ‘frequency’ to represent the data (e.g. Q33(2)/M2, Q33(3)/M3).

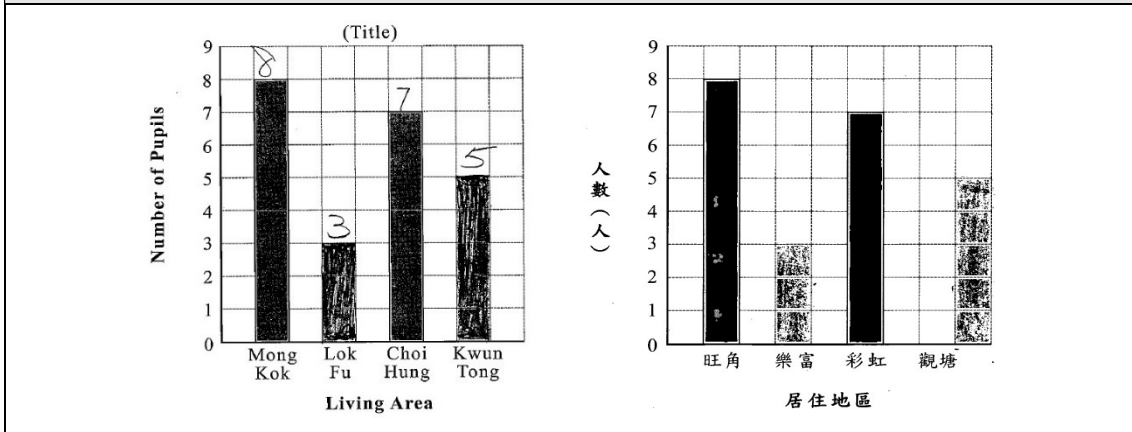
Q33(2)/M2	Q33(3)/M3																																											
<p style="text-align: center;">每個 ○ 代表 1 條</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; padding: 5px;">粉紅色</td> <td style="border: 1px solid black; text-align: center;">○ ○ ○ ○ ○ ○</td> </tr> <tr> <td style="padding: 5px;">白色</td> <td style="border: 1px solid black; text-align: center;">████████████████</td> </tr> <tr> <td style="padding: 5px;">藍色</td> <td style="border: 1px solid black; text-align: center;">████████████████</td> </tr> <tr> <td style="padding: 5px;">綠色</td> <td style="border: 1px solid black; text-align: center;">○ ○</td> </tr> </table>	粉紅色	○ ○ ○ ○ ○ ○	白色	████████████████	藍色	████████████████	綠色	○ ○	<p style="text-align: center;">Each ○ stands for 1 pupil</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%; text-align: center;">○</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td></td> <td style="text-align: center;">6</td> <td style="text-align: center;">○</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">0</td> <td style="text-align: center;">○</td> <td></td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">0</td> <td style="text-align: center;">○</td> <td></td> <td style="text-align: center;">○</td> </tr> <tr> <td style="text-align: center;">○</td> <td style="text-align: center;">0</td> <td style="text-align: center;">○</td> <td style="text-align: center;">2</td> <td style="text-align: center;">○</td> </tr> <tr> <td style="text-align: center;">○</td> <td style="text-align: center;">0</td> <td style="text-align: center;">○</td> <td style="text-align: center;">0</td> <td style="text-align: center;">○</td> </tr> <tr> <td style="text-align: center;">○</td> <td style="text-align: center;">0</td> <td style="text-align: center;">○</td> <td style="text-align: center;">0</td> <td style="text-align: center;">○</td> </tr> </table>			○				6	○				0	○		5	3	0	○		○	○	0	○	2	○	○	0	○	0	○	○	0	○	0	○
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Bar Charts

- Most students were able to read bar charts with a one-to-five representation and extract data from them (e.g. Q32(a)/M3). They were also able to use the extracted data to perform simple calculations to solve problems (e.g. Q32(b)/M3).
- Students showed good performance in reading bar charts with a one-to-two representation (e.g. Q32(a)/M2). However, some students were unable to use the extracted data for comparison to solve problems (e.g. Q32(b)/M2).
- The majority of students were able to construct bar charts by drawing bars to the correct length and at the appropriate position on the axis according to the given frequency data (e.g. Q33(b)(2)/M1).

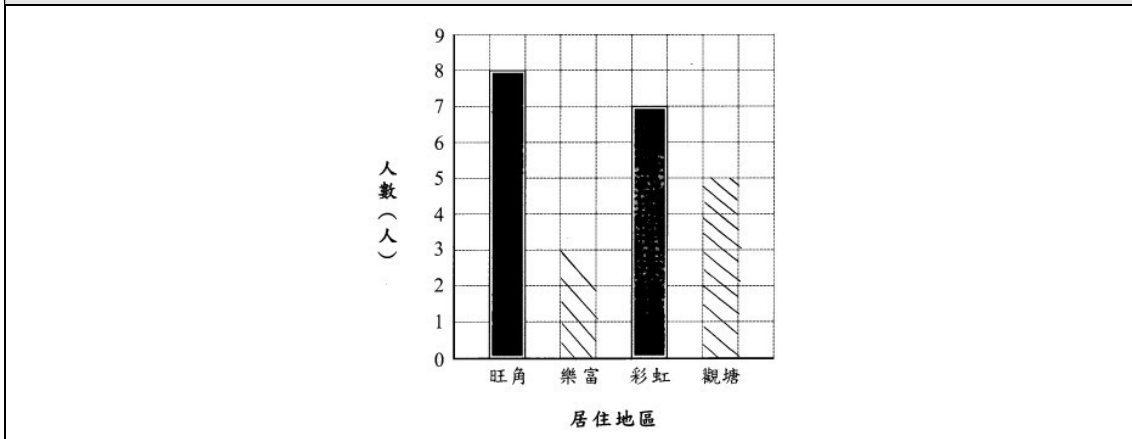
- A few students incorrectly labeled bars with frequency or drew bars on the wrong positions (e.g. Q33(b)(2)/M1).

Q33(b)(2)/M1



- A few students did not draw complete bars, resulting in an incorrect representation of the frequencies (e.g. Q33(b)(2)/M1).

Q33(b)(2)/M1



General Comments on Primary 3 Student Performances

- The performance of P.3 students in the Number Strand was good. They mastered the basic concepts of whole numbers and fractions learned in Key Stage 1 and showed good performance in the four arithmetic operations. Generally, students were able to solve simple application problems and demonstrate correct mathematical expressions and working steps. Students were quite good in mixed operations involving multiplication and addition. Additionally, students demonstrated very good performance in addition operations involving fractions with the same denominator.
- The performance of P.3 students was good in the Measures Strand. Students were able to identify the money in circulation in Hong Kong and read price tags. They were also good at using a ruler to measure the length of objects, measuring the weight of objects in ‘gram’ or ‘kilogram’, and measuring the capacity of containers in ‘millilitres’. Students performed well in selecting appropriate tools to measure the length, weight, and capacity of objects. They could tell time from both analog clock and digital clock. The majority of students were able to apply the ‘24-hour time’ and calculate dates and days of the week from a calendar. However, some students showed fair performance when comparing the weight of objects in improvised units. Their performance was fair in recording the weight of objects in appropriate units.
- The performance of P.3 students in the Shape and Space Strand was good. Students were able to identify 2-D shapes, straight lines, curves, parallel lines and perpendicular lines. They could compare the sizes of angles. Their performance was quite good in identifying spheres intuitively and demonstrating recognition of the four directions. However, their performance was fair in identifying acute angles.
- The performance of P.3 students in the Data Handling Strand was good. Students were generally able to interpret data from pictograms and bar charts and perform simple calculations to answer questions. They were good at constructing bar charts based on tabulated data. Their performance in creating pictograms was also satisfactory.

Good Performance of Primary 3 Students in 2024

- Students with good performance were able to grasp the mathematical concepts and problem-solving techniques assessed by the sub-papers. Their computational skills were strong, allowing them to solve application problems in various contexts. They demonstrated correct solutions in solving application problems (e.g. Q13/M2, Q9/M3).





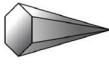




Q13/M2	Q9/M3
$(4 \times 3) + 4$ $= 12 + 4$ $= 16$ <p>兩人共吃了荔枝16粒。</p>	$130 + 298 + 215$ $= 603 \text{ (包)}$ <p>糖果店原有糖果603包。</p>

- Students with good performance demonstrated a thorough understanding of concepts of fractions. They demonstrated recognition of the relationship between fractions and the whole, were able to compare the magnitude of fractions with same denominator or same numerator, and could solve problems involving the addition and subtraction of fractions with the same denominator that are illustrated by diagrams (e.g. Q16/M1, Q17/M4).

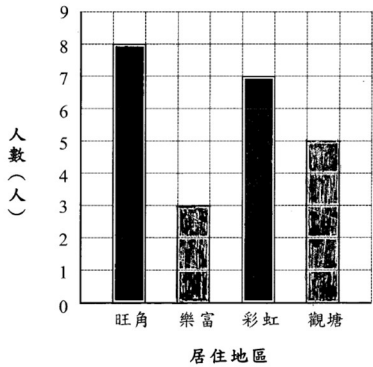
Q16/M1	Q17/M4
$\frac{3}{6} + \frac{2}{6}$ $= \frac{5}{6} \text{ (個)}$ <p>∴兩人共吃了蛋糕$\frac{5}{6}$個。</p>	$\frac{8}{9} - \frac{3}{9}$ $= \frac{5}{9}$ <p>Andy has $\frac{5}{9}$ of the box of chocolate.</p>

- Students with good performance were able to identify the money in circulation in Hong Kong, read price tags and handle more complex operations involving 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 length of objects in improvised units.
- Students with good performance were able to accurately calculate the total number of days of the study tour based on the given start and end dates.

- Students with good performance were capable of identifying different 3-D shapes (e.g. Q26/M3) and 2-D shapes intuitively (e.g. Q28/M1).

Q26/M3	Q28/M1
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <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: flex-start; margin-top: 20px;"> <div style="text-align: center;">  D. </div> <div style="text-align: center;">  E. </div> </div> <p style="margin-top: 20px;">(a) 角柱: <u>A, C</u></p> <p>(b) 圓錐: <u>D</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 style="margin-top: 20px;">(a) Pentagon(s): <u>C</u></p> <p>(b) Parallelogram(s): <u>D</u></p>

- Students with good performance were able to identify straight lines and curves intuitively, as well as perpendicular lines and parallel lines. They performed well in identifying right angles and acute angles. They were able to accurately identify the four directions including the ‘north’ direction pointing to the right of the map.
- 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																																		
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">3D班學生居住的地區</p> <p style="text-align: center;">(標題)</p> </div>  <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse; text-align: center;"> <caption>Bar Chart Data</caption> <thead> <tr> <th>居住地區</th> <th>人數(人)</th> </tr> </thead> <tbody> <tr> <td>旺角</td> <td>8</td> </tr> <tr> <td>樂富</td> <td>3</td> </tr> <tr> <td>彩虹</td> <td>7</td> </tr> <tr> <td>觀塘</td> <td>5</td> </tr> </tbody> </table>	居住地區	人數(人)	旺角	8	樂富	3	彩虹	7	觀塘	5	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;">The number of dresses in different colours at home.</p> <p style="text-align: center;">(Title)</p> </div> <p style="text-align: center;">Each ○ stands for 1 dress</p> <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse; text-align: center;"> <tbody> <tr> <td style="padding: 2px;">Pink</td> <td>○</td><td>○</td><td>○</td><td>○</td><td>○</td> </tr> <tr> <td style="padding: 2px;">White</td> <td>○</td><td>○</td><td>○</td><td>○</td><td></td> </tr> <tr> <td style="padding: 2px;">Blue</td> <td>○</td><td>○</td><td>○</td><td></td><td></td> </tr> <tr> <td style="padding: 2px;">Green</td> <td>○</td><td>○</td><td></td><td></td><td></td> </tr> </tbody> </table>	Pink	○	○	○	○	○	White	○	○	○	○		Blue	○	○	○			Green	○	○			
居住地區	人數(人)																																		
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Overview of Primary 3 Student Performances in Mathematics in 2019, 2023 and 2024

The percentages of P.3 students achieving Mathematics Basic Competency in 2019, 2023 and 2024 are provided below.

Table 8.2 Percentages of P.3 Students Achieving Mathematics Basic Competency in 2019, 2023 and 2024**

Year	% of Students Achieving Mathematics Basic Competency
2019	87.7
2023	86.5
2024	85.3

** Due to the volatility of the Coronavirus Disease 2019 (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 2019, 2023 and 2024 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 2019, 2023 and 2024

Year Number	2019	2023	2024	Remarks
Strengths	<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 were able to demonstrate recognition of places. • Students were good at addition, subtraction and multiplication of whole numbers, and also showed a satisfactory performance in division. • Students were generally able to solve application problems and demonstrate the solutions and the working steps. 	<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"> • A few students confused the minuend with the subtrahend in writing the mathematical expressions. • A few students were careless in reading the questions 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. 	<ul style="list-style-type: none"> • A few students were unable to understand the meaning of the quotient and remainder in division application problems, leading to incorrect answers. • A few students made mistakes due to careless reading of the questions. 	

Year Measures	2019	2023	2024	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 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"> Students were able to identify the money in circulation in Hong Kong and read price tags. Students performed well in using a ruler to measure the length of objects. Students were able to measure the weight of objects in ‘gram’(g) or ‘kilogram’(kg). Students were able to measure the capacity of containers and record the capacity using appropriate units. 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 with demonstrations.
Weaknesses	<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. 	<ul style="list-style-type: none"> There was room for improvement in students’ performance when handling more complex operations involving money in daily life. 	

Shape and Space \ Year	2019	2023	2024	Remarks
Strengths	<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"> Students were able to recognize standard 2-D shapes intuitively. Students were able to identify and draw parallel lines, and showed satisfactory performance in recognizing straight and curved lines intuitively. Students were able to recognize right-angled triangles, isosceles triangles, and equilateral triangles intuitively. Students were capable of demonstrating recognition of the four directions. 	<ul style="list-style-type: none"> Demonstrate various 3-D shapes and present them in different orientations.
Weaknesses	<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. 	<ul style="list-style-type: none"> Students' performance was relatively weak in identifying pyramids and prisms, and were easily influenced by the orientation of the shapes. Student's performance was relatively weak in identifying parallelograms intuitively. 	

Year	2019	2023	2024	Remarks
Data Handling				
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 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"> 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 bar charts from tabular data. 	<ul style="list-style-type: none"> Let the students understand the key points in constructing pictogram and bar chart.
Weaknesses	<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. 	<ul style="list-style-type: none"> A small proportion of students could not express the title for statistical charts explicitly. 	