Territory-wide System Assessment 2024 (Primary 3)
Assessment Design
Mathematics

Design Rationale

- The Primary 3 Assessment is designed with reference to the *Mathematics Education Key Learning Area Curriculum Guide (Primary 1 – Secondary 6)(2017)* and the *Basic Competency Descriptors for Key Stage 1 Mathematics Curriculum*. The Assessment covers the four strands of the Primary 1 to 3 curricula, namely Number, Measures, Shape & Space and Data Handling. It focuses on the concepts, knowledge, skills and applications in these areas.

- According to the suggestions given by the Coordinating Committee on Basic Competency Assessment and Assessment Literacy (Coordinating Committee), the principles for modifications of paper and question design include the consideration of learning needs of students, serving to lessen students' burden of learning, aligning with the spirit of the curriculum and reflecting the standards of basic competencies. Starting from 2016, the quantities and design of the test items in each sub-paper of Mathematics are adjusted by the Moderation Committee according to the recommendations by the Coordinating Committee.

Assessment Content

- The Assessment is conducted in a paper-and-pencil mode. The items are grouped into 4 sub-papers of 40 minutes each in order to cover adequately the areas to be assessed in Key Stage 1. Each pupil is required to attempt one of the sub-papers only. Each sub-paper consists of about 30 test items covering the four strands, namely Number, Measures, Shape & Space and Data Handling. Some test items may consist of sub-items. Some items appear in more than one sub-paper to act as inter-paper links.

- In the Assessment, various types of test items such as multiple-choice questions, fill in the blanks, and writing mathematical expressions, solutions and explanations are used.

- The principles for question design of Mathematics Assessment (Primary 3) in 2024 are as follows:

  (i) Only one basic competency is assessed in each item;
  (ii) Distractors in multiple-choice items align with basic competencies;
  (iii) Items requiring students to solve linking problems are minimized with marking criteria adjusted as appropriate;
  (iv) The assessment items are set with the context familiar to students.

Mathematics Assessment

Sub-paper 1 (3ME1)

Learning Unit	Basic Competency Descriptor*	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M1-Q01 In which of the following numbers is the digit '2' in the tens place? ○ A. 7 942 ○ B. 21 446 ○ C. 32 783 ○ D. 37 824 Assessment focus: Recognize the place value of tens.	A. B. C. D. Correct Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M1-Q02 Write 'thirty thousand and forty' in numerals. Answer: _____ Assessment focus: Write numbers up to 5 digits.	30 040

* Please refer to the BCA website (http://cd1.edb.hkedcity.net/cd/eap_web/bca/index3.htm) for the Basic Competencies Descriptors documents

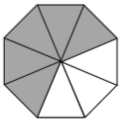
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M1-Q03 The following table shows the number of logins for the online game 'Happy Farm' in the first three days. <table><tr><td></td><td>Day 1</td><td>Day 2</td><td>Day 3</td></tr><tr><td>Number of logins</td><td>16 158</td><td>9 489</td><td>15 991</td></tr></table> Arrange the number of logins in the first three days from the smallest to the largest. Answer: _____ (Smallest), _____, _____ (Largest) Assessment focus: Order numbers up to 5 digits.	9 489, 15 991, 16 158 respectively
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M1-Q04 436 + 157 + 242 = _____ Assessment focus: Perform addition.	835

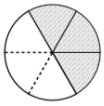
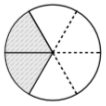
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M1-Q05 560 – 246 – 46 = ○ A. 268 ○ B. 314 ○ C. 320 ○ D. 360 Assessment focus: Perform subtraction.	A. Correct Answer B. C. D.
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M1-Q06 9 × 764 = _____ × 9 Assessment focus: Recognize the commutative property of multiplication.	764

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M1-Q07 $628 \div 4 =$ _____ Assessment focus: Perform division.	157
Four Arithmetic Operations	KS1-N2-3: Perform mixed operations of: (a) addition and subtraction, involving using brackets; (b) multiplication and addition, multiplication with numbers not greater than 10 (not involving using brackets); and (c) multiplication and subtraction, multiplication with numbers not greater than 10 (not involving using brackets) of three numbers at most.	3M1-Q08 $28 - 6 \times 4 =$ _____ Assessment focus: Perform mixed operations of multiplication and subtraction.	4

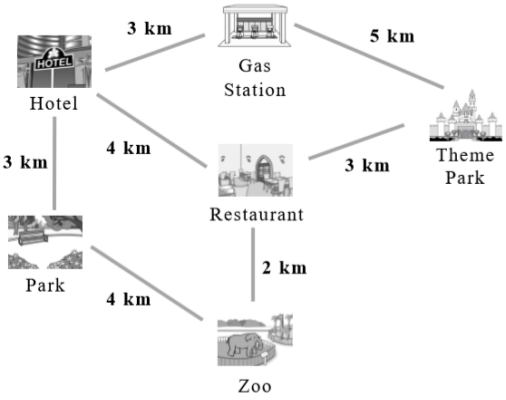
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M1-Q09 Alan has 285 dollars. He has 75 dollars less than Miffy. Miffy has ○ A. 210 dollars. ○ B. 350 dollars. ○ C. 360 dollars. ○ D. 645 dollars. Assessment focus: Solve problems involving addition.	A. B. C. Correct Answer D.
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M1-Q10 There are 198 students joining the flag-selling activity. Ms Lee divides the students evenly into 9 groups. There are _____ students in each group. Assessment focus: Solve problems involving division.	22
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M1-Q11 There are 8 pens in a box. Mr Chan buys 5 boxes of pens. There are 16 red pens and the remaining pens are blue. There are _____ blue pens. Assessment focus: Solve problems involving mixed operations.	24

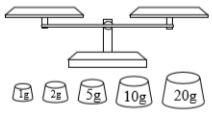
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M1-Q12  Building Blocks 389 dollars  Model Bus 509 dollars The toy store is having a sale. Buying two toys gets 80 dollars off. Richard buys a box of building blocks and a model bus. How much does he have to pay altogether? (Show your working) Assessment focus: Solve problems involving mixed operations.	389 + 509 – 80 = 818 He has to pay 818 dollars altogether.
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M1-Q13 Lily reads for 27 minutes every day. She reads a total of _____ minutes in 5 days. Assessment focus: Solve problems involving multiplication.	135

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M1-Q14 In the following figure, what fraction of the whole is shaded?  ○ A. $\frac{1}{2}$ ○ B. $\frac{3}{5}$ ○ C. $\frac{3}{8}$ ○ D. $\frac{5}{8}$ Assessment focus: Recognize the concept of fractions as a part of one whole.	A. B. C. D. Correct Answer
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M1-Q15 8 is * smaller than / equal to / larger than $\frac{8}{8}$. (*Circle the answer) Assessment focus: Recognize the relationship between fractions and the whole.	Circle 'larger than'

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M1-Q16 Mother buys a cake. Wilson eats $\frac{3}{6}$ of the cake. Nancy eats $\frac{2}{6}$ of the cake. How much of the cake do they eat altogether? Wilson eats:  Nancy eats:  (Show your working) Assessment focus: Solve problems involving addition of fractions with the same denominators that are illustrated by diagrams.	$\frac{3}{6} + \frac{2}{6}$ $= \frac{5}{6}$ They eat $\frac{5}{6}$ of the cake altogether.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M1-Q17(a)  (a) An ice cream costs _____ dollars and _____ cents. Assessment focus: Read price tags.	7, 60 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M1-Q17(b) (b) Paul pays  to buy an ice cream. Circle the change returned to Paul by the shopkeeper.  Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "$2.40"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-4 Compare the lengths of objects and compare the distances between objects in "kilometer" (km).	3M1-Q18(a) Study the following diagram and answer the questions below.  (a) It is only 7 km from Restaurant to Gas Station passing through _____ . Assessment focus: Express and compare the distance between objects using 'kilometre' (km).	Hotel
Length and Distance	KS1-M2-4 Compare the lengths of objects and compare the distances between objects in "kilometer" (km).	3M1-Q18(b) (b) The shortest route from Zoo to Hotel is _____ km. Assessment focus: Express and compare the distance between objects using 'kilometre' (km).	6

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-4 Measure the weights of objects with appropriate tools.	3M1-Q19  Which of the following is most suitable for measuring the weight of a battery?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the weight of an object with appropriate measuring tools.	A. B. C. Correct Answer D.
Capacity	KS1-M5-5 Record the capacities of containers in an appropriate single unit.	3M1-Q20 Fill in the following blank with a suitable unit. The capacity of a soft drink can is about 330 _____ . Assessment focus: Record the capacities of containers with appropriate unit.	millilitres / mL

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	3M1-Q21(a) Sally goes to the park. She arrives at the park at  . (a) Sally arrives at _____ minute(s) past _____ in the * morning / afternoon . (*Circle the answer) Assessment focus: Tell time from a digital clock.	10, 8, circle “morning” respectively
Time	KS1-M3-3 Record the duration of time for different activities in “hours”, “minutes” or “seconds”(not involving changing units).	3M1-Q21(b) (b) She leaves the park at  . She stays in the park for _____ hour(s). Assessment focus: Record the duration of time for different activities in ‘hours’.	2

<table>
<tr><th>Learning Unit</th><th>Basic Competency Descriptor</th><th>Item Number</th><th>Option / Answer</th></tr>
<tr><td>Time</td><td>KS1-M3-1
Demonstrate recognition of the dates and days of a week.</td><td>3M1-Q22(a)

Answer the following questions according to the calendar for August below.

<table><tr><th colspan="7">August</th></tr><tr><th>Sunday</th><th>Monday</th><th>Tuesday</th><th>Wednesday</th><th>Thursday</th><th>Friday</th><th>Saturday</th></tr><tr><td></td><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td></tr><tr><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr><tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr><tr><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td></tr></table>
(a) Orientation Day is on the 26th of August.
That day is _____ .
(day of the week)

Assessment focus:
Recognize the days of a week.</td><td>Monday</td></tr>
<tr><td>Time</td><td>KS1-M3-1
Demonstrate recognition of the dates and days of a week.</td><td>3M1-Q22(b)

(b) The study tour is held from the 7th of August to the 10th of August. It lasts for _____ days in total.

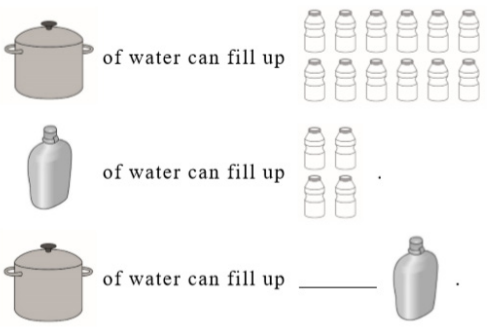
Assessment focus:
Recognize the dates.</td><td>4</td></tr>
</table>

<table>
<tr><th>Learning Unit</th><th>Basic Competency Descriptor</th><th>Item Number</th><th>Option / Answer</th></tr>
<tr><td>Time</td><td>KS1-M3-4
Apply the “24-hour time”, involving the interconversion with the “12-hour time”.</td><td>3M1-Q23

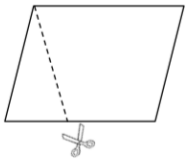
The timetable of the magic show is shown below.

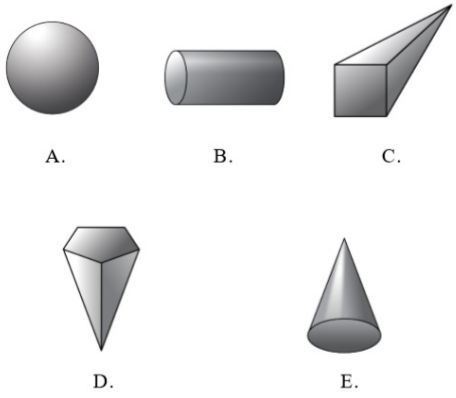
<table><tr><td></td><td>Starting Time</td></tr><tr><td>The First Show</td><td>10:15</td></tr><tr><td>The Second Show</td><td>13:45</td></tr><tr><td>The Third Show</td><td>16:15</td></tr></table>
The third show starts
at _____ minute(s) past _____ in the
* morning / afternoon .
(*Circle the answer)

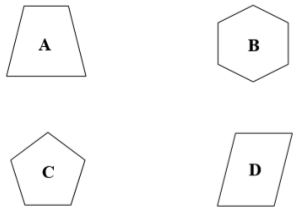
Assessment focus:
Apply the ‘24-hour time’.</td><td>15, 4, circle “afternoon” respectively</td></tr>
<tr><td>Capacity</td><td>KS1-M5-2
Compare the capacities of containers in improvised units.</td><td>3M1-Q24

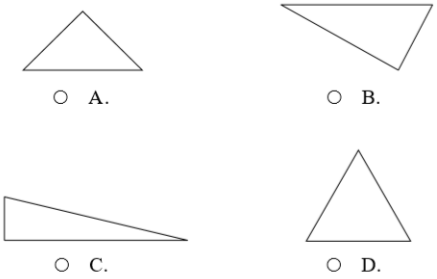
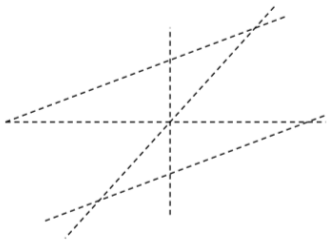
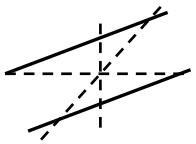
 

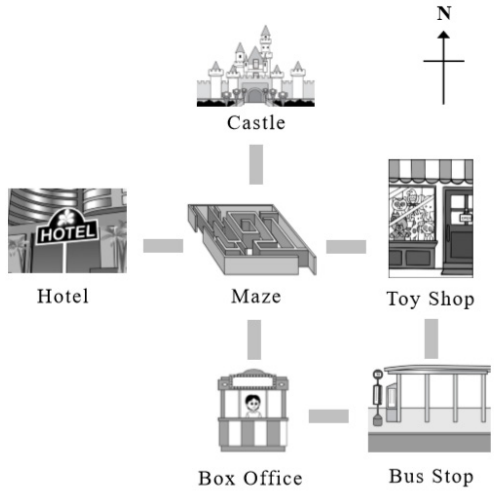
Assessment focus:
Measure and compare the capacity of containers using improvised units.</td><td>3</td></tr>
</table>

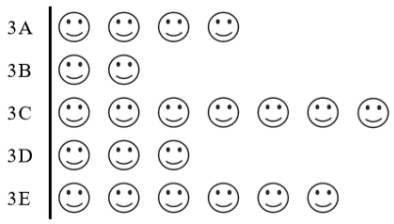
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M1-Q25  The 3-D shape above is a ○ A. pyramid. ○ B. cone. ○ C. prism. ○ D. circle. Assessment focus: Identify cones intuitively.	A. B. Correct Answer C. D.
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M1-Q26  Tom cuts the parallelogram above along the dotted line. He gets one triangle and one * trapezium / rectangle / pentagon . (*Circle the answer) Assessment focus: Identify trapeziums intuitively.	Circle “trapezium”

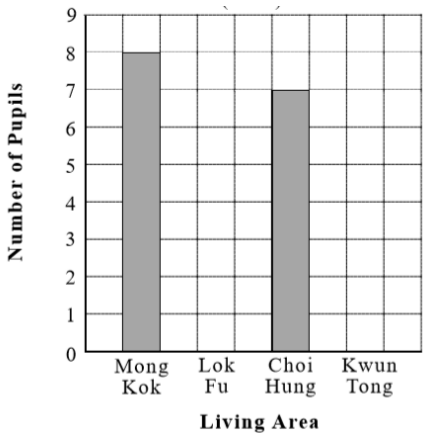
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M1-Q27(a) Study the 3-D shapes below. Write down all the letters for the answers.  A. B. C. D. E. List: (a) Sphere(s): _____ Assessment focus: Identify spheres intuitively.	A
3-D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M1-Q27(b) (b) Pyramid(s): _____ Assessment focus: Identify pyramids intuitively.	C，D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M1-Q28(a) Study the 2-D shapes below. Write down all the letters for the answers.  List: (a) Pentagon(s): _____ Assessment focus: Identify pentagons intuitively.	C
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M1-Q28(b) (b) Parallelogram(s): _____ Assessment focus: Identify parallelograms intuitively.	D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-2: Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	3M1-Q29 Which of the following 2-D shapes is an equilateral triangle?  Assessment focus: Identify equilateral triangles intuitively.	A. B. C. D. Correct Answer
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M1-Q30 In the figure below, draw along the dotted lines to show a pair of parallel lines.  Assessment focus: Identify parallel lines.	

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M1-Q31(a) The location map of a theme park is shown below.  (a) Starting from Maze, Keith goes west to reach * Toy Shop / Castle / Hotel . (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Hotel"
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M1-Q31(b) (b) Bus Stop is to the * east / south / west / north of Toy Shop. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "south"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M1-Q32(a) Ms Chan did a survey of the number of pupils in each primary three class taking the school bus. **Number of Pupils in Each Primary Three Class Taking the School Bus** Each ☺ stands for 1 pupil  (a) The number of pupils in Class _____ taking the school bus was the most. There were _____ pupils. Assessment focus: Interpret pictograms with a one-to-one representation.	3C, 7 Respectively
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M1-Q32(b) (b) The total number of primary three pupils taking the school bus was _____ . Assessment focus: Interpret pictograms with a one-to-one representation.	22

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M1-Q33(a) Mr Cheung did a survey of the living areas of P.3D pupils. (a) According to the record, complete the table below. Living Area / Mong Kok / Lok Fu / Choi Hung / Kwun Tong Record / 𝍸 | / ||| / 𝍸 || / 𝍸 Number of pupils / / 3 / / 5 Assessment focus: Complete the information in a table according to the record of a survey.	8, 7 respectively
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M1-Q33(b)(1) (b) According to the results, use a pencil to complete the following bar chart and give it a title. (Title) Assessment focus: Give a title for the bar chart.	Title: Living Areas of P.3D Pupils
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M1-Q33(b)(2)  Assessment focus: Construct bar charts using a one-to-one representation.	Lok Fu: 3 boxes Kwun Tong: 5 boxes

Sub-paper 2 (3ME2)

Learning Unit	Basic Competency Descriptor*	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M2-Q01 Write a 5-digit number according to the instructions below. The digit '5' is in the units place. The digit '6' is in the ten thousands place. The digit '4' is in the tens place. The digit '2' is in the thousands place. The digit '7' is in the hundreds place. Assessment focus: Recognize the place values: units, tens, hundreds, thousands and ten thousands.	62 745
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M2-Q02 Write 'thirty thousand and forty' in numerals. Answer: _____ Assessment focus: Write numbers up to 5 digits.	30 040
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M2-Q03 The following table shows the number of logins for the online game 'Happy Farm' in the first three days. Arrange the number of logins in the first three days from the smallest to the largest. Answer: _____ (Smallest), _____, _____ (Largest) Assessment focus: Order numbers up to 5 digits.	9 489, 15 991, 16 158 respectively

	Day 1	Day 2	Day 3
Number of logins	16 158	9 489	15 991

* Please refer to the BCA website (http://cd1.edb.hkedcity.net/cd/eap_web/bca/index3.htm) for the Basic Competencies Descriptors documents

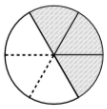
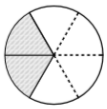
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M2-Q04 Write an ***even number*** which is larger than 79 462 but smaller than 81 345. Answer: _____ Assessment focus: Write numbers up to 5 digits.	Accept any 5-digit even number between 79 464 and 81 344
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M2-Q05 248 + 354 = _____ Assessment focus: Perform addition.	602
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M2-Q06 837 – 461 = _____ Assessment focus: Perform subtraction.	376

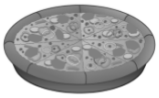
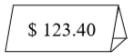
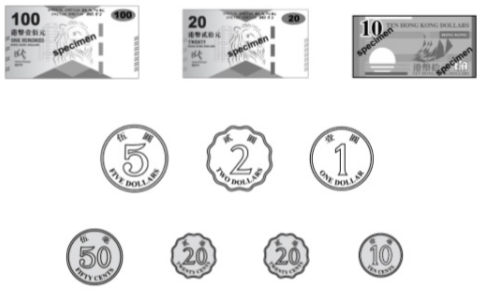
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M2-Q07 $502 \times 3 =$ _____ Assessment focus: Perform multiplication.	1 506
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M2-Q08 $904 \div 6 =$ ○ A. 150…4 ○ B. 150 ○ C. 105…4 ○ D. 15…4 Assessment focus: Perform division.	A. Correct Answer B. C. D.

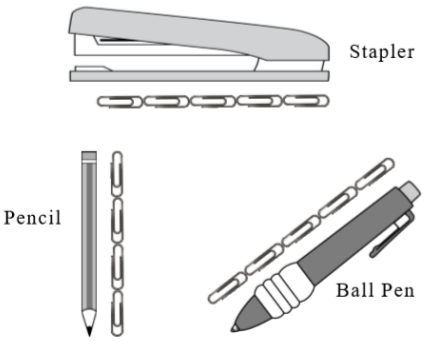
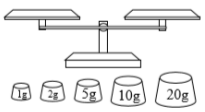
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-3: Perform mixed operations of: (a) addition and subtraction, involving using brackets; (b) multiplication and addition, multiplication with numbers not greater than 10 (not involving using brackets); and (c) multiplication and subtraction, multiplication with numbers not greater than 10 (not involving using brackets) of three numbers at most.	3M2-Q09 $61 + 8 \times 2 =$ ○ A. 16 ○ B. 69 ○ C. 77 ○ D. 138 Assessment focus: Perform mixed operations of multiplication and addition.	A. B. C. Correct Answer D.
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M2-Q10 There are 198 students joining the flag-selling activity. Ms Lee divides the students evenly into 9 groups. There are _____ students in each group. Assessment focus: Solve problems involving division.	22
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M2-Q11 There are 182 people in the museum originally. After 69 people leave, there are _____ people remaining. Assessment focus: Solve problems involving subtraction.	113

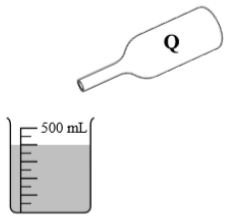
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M2-Q12 Lily reads for 27 minutes every day. She reads a total of _____ minutes in 5 days. Assessment focus: Solve problems involving multiplication.	135
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M2-Q13 Michael eats 4 lychees. Christy eats 3 times as many lychees as Michael. How many lychees do they eat altogether? (Show your working) Assessment focus: Solve problems involving mixed operations.	$4 + 4 \times 3$ $= 16$ They eat 16 lychees altogether.

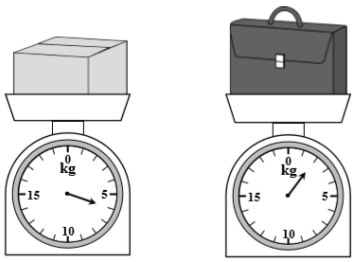
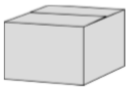
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M2-Q14(a) There are 12 balls in the store. $\frac{1}{4}$ of the whole are red. The rest are green.  (a) There are _____ red balls. Assessment focus: Recognize the concept of fractions as a part of one whole.	3
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M2-Q14(b) (b) $\frac{\square}{\square}$ of the whole are green balls. Assessment focus: Recognize the concept of fractions as a part of one whole.	3/4 or 9/12
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M2-Q15 Fill in the box with a suitable number. $\frac{4}{7}$ is larger than $\frac{4}{\square}$. Assessment focus: Compare the magnitude of fractions with same numerators.	Accept any whole number larger than 7

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M2-Q16 Mother buys a cake. Wilson eats $\frac{3}{6}$ of the cake. Nancy eats $\frac{2}{6}$ of the cake. How much of the cake do they eat altogether? Wilson eats:  Nancy eats:  (Show your working) Assessment focus: Solve problems involving addition of fractions with the same denominators that are illustrated by diagrams.	$\frac{3}{6} + \frac{2}{6}$ $= \frac{5}{6}$ They eat $\frac{5}{6}$ of the cake altogether.

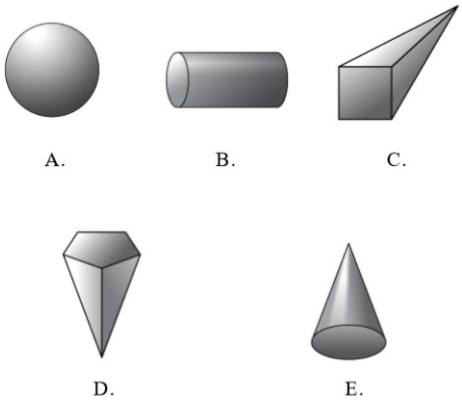
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M2-Q17(a)   (a) A pizza costs _____ dollars and _____ cents. Assessment focus: Read price tags.	123, 40 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M2-Q17(b) (b) Kelvin buys a pizza. Circle the amount he should pay.  Assessment focus: Use and exchange Hong Kong money.	Circle the amount of "$123.40"

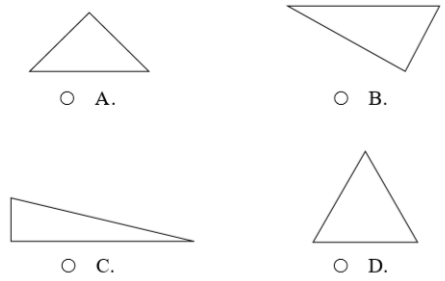
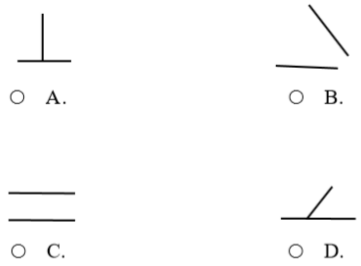
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-2 Compare the lengths of objects and compare the distances between objects in improvised units (e.g. a paper clip, a book).	3M2-Q18  Compare the lengths of the ball pen, the pencil and the stapler above. The * ball pen / pencil / stapler is the longest. (*Circle the answer) Assessment focus: Compare the length of objects using improvised units.	Circle "stapler"
Weight	KS1-M4-4 Measure the weights of objects with appropriate tools.	3M2-Q19  Which of the following is most suitable for measuring the weight of a battery?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the weight of an object with appropriate measuring tools.	A. B. C. Correct Answer D.

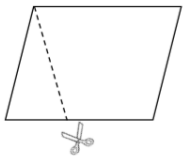
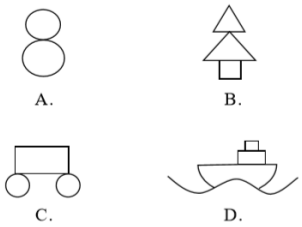
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-7 Record the lengths of objects and the distances between objects in an appropriate single unit.	3M2-Q20(a) Fill in the following blanks with suitable units. (a) The length of a lorry is about 6 _____ . Assessment focus: Record the length of objects with an appropriate single unit.	metres/ m
Weight	KS1-M4-5 Record the weights of objects in an appropriate single unit.	3M2-Q20(b) (b) The weight of a scooter is about 5 _____ . Assessment focus: Record the weight of objects with appropriate units.	kilograms / kg
Capacity	KS1-M5-3 Measure and compare the capacities of containers in "litre" (L) or "milliliter" (mL).	3M2-Q21 Fill up container **Q** with water and then pour all the water into an empty measuring cup.  The capacity of container **Q** is _____ mL. Assessment focus: Measure the capacity of containers using 'millilitre' (mL).	400

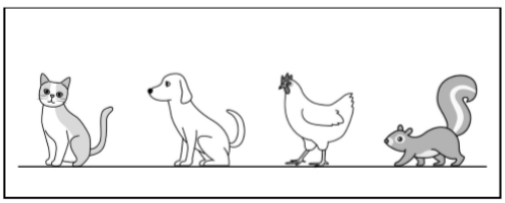
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M2-Q22(a)  (a) The weight of  is _____ kg. Assessment focus: Measure the weight of objects using 'kilogram' (kg).	2
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M2-Q22(b) (b)  is _____ kg * lighter / heavier than  . (*Circle the answer) Assessment focus: Measure and compare the weight of objects using 'kilogram' (kg).	4, circle "lighter" respectively

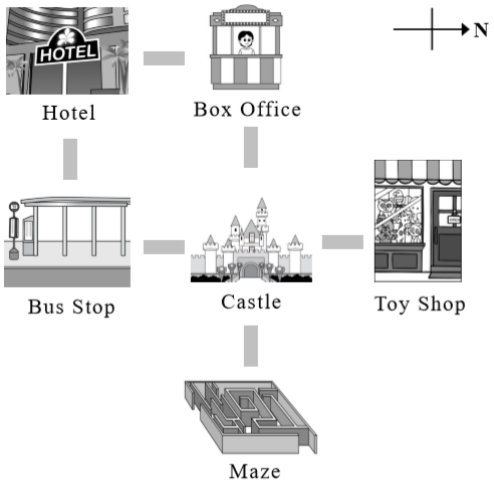
<table>
<tr><th>Learning Unit</th><th>Basic Competency Descriptor</th><th>Item Number</th><th>Option / Answer</th></tr>
<tr><td>Time</td><td>KS1-M3-1
Demonstrate recognition of the dates and days of a week.</td><td>3M2-Q23(a)
Answer the following questions according to the calendar for April below.
<table><tr><th colspan="7">April</th></tr><tr><th>Sunday</th><th>Monday</th><th>Tuesday</th><th>Wednesday</th><th>Thursday</th><th>Friday</th><th>Saturday</th></tr><tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr><tr><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr><tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td></tr><tr><td>28</td><td>29</td><td>30</td><td></td><td></td><td></td><td></td></tr></table>(a) Grandfather's birthday is on the second Friday of April. That day is the _____ of _____ .
(month)
Assessment focus:
Recognize the dates.</td><td>12th, April respectively</td></tr>
<tr><td>Time</td><td>KS1-M3-1
Demonstrate recognition of the dates and days of a week.</td><td>3M2-Q23(b)
(b) Cecilia has a violin class every Sunday.
She has _____ violin classes in April.
Assessment focus:
Recognize the days of a week.</td><td>4</td></tr>
</table>

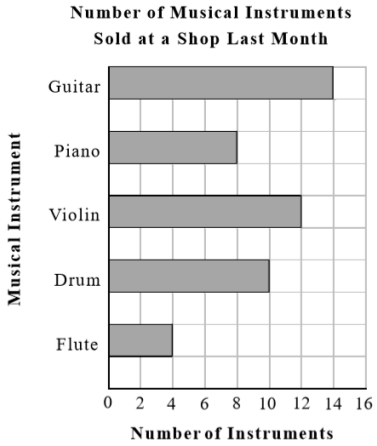
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M2-Q24(a) Study the 3-D shapes below. Write down all the letters for the answers.  A. B. C. D. E. List: (a) Sphere(s): _____ Assessment focus: Identify spheres intuitively.	A
3-D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M2-Q24(b) (b) Pyramid(s): _____ Assessment focus: Identify pyramids intuitively.	C，D

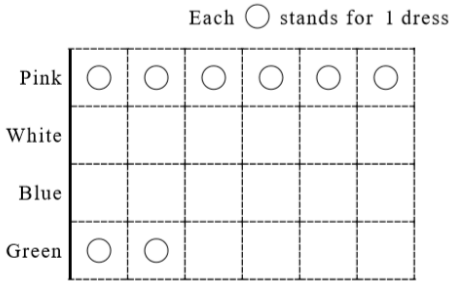
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-2: Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	3M2-Q25 Which of the following 2-D shapes is an equilateral triangle?  Assessment focus: Identify equilateral triangles intuitively.	A. B. C. D. Correct Answer
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M2-Q26 Which of the following figures is formed by a pair of parallel lines?  Assessment focus: Identify parallel lines.	A. B. C. Correct Answer D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M2-Q27  Tom cuts the parallelogram above along the dotted line. He gets one triangle and one * trapezium / rectangle / pentagon . (*Circle the answer) Assessment focus: Identify trapeziums intuitively.	Circle "trapezium"
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M2-Q28(a) Study the figures below. Write down all the letters for the answers.  A. B. C. D. List: (a) The figure(s) formed by straight line(s) and curve(s) : _____ Assessment focus: Identify straight lines and curves intuitively.	C，D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M2-Q28(b) (b) The figure(s) formed by curve(s) only: _____ Assessment focus: Identify straight lines and curves intuitively.	A
Angles	KS1-S4-2 Compare the sizes of angles.	3M2-Q29 Study the diagram below. Arrange the angles x, y and z from the largest to the smallest.  Answer: _____ , _____ , _____ (Largest) (Smallest) Assessment focus: Compare the sizes of angles.	z, y, x respectively
Directions and Positions	KS1-S5-1 Describe the relative positions of objects using “over”, “under”, “left”, “right”, “in front of”, “behind” and “between”.	3M2-Q30 Mr Lee puts a picture on a wall.  *  is between  and  . (*Circle the answer) Assessment focus: Describe the relative positions of objects using “over”, “under”, “left”, “right”, “in front of”, “behind” and “between”.	Circle “  ”

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M2-Q31(a) The location map of a theme park is shown below.  (a) * Box Office / Toy Shop / Maze is to the east of Castle. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Maze"
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M2-Q31(b) (b) Starting from Bus Stop, Tammy goes * east / south / west / north to reach Castle. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "north"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Bar Charts	KS1-D2-1 Interpret bar charts with a one-to-one, one-to-two or one-to-five representation.	3M2-Q32(a) A shopkeeper did a survey of the number of musical instruments sold at a shop last month.  (a) The most sold musical instrument was the _____ . There were _____ of this kind of instruments sold. Assessment focus: Interpret bar charts with a one-to-two representation.	guitar, 14 respectively
Bar Charts	KS1-D2-1 Interpret bar charts with a one-to-one, one-to-two or one-to-five representation.	3M2-Q32(b) (b) The number of drums sold was _____ * more / less than that of flutes. (*Circle the answer) Assessment focus: Interpret bar charts with a one-to-two representation.	6, circle “more” respectively

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M2-Q33(1) Macy did a survey of the number of dresses in different colours at home. The results are as follows: <table><tr><td>Colour</td><td>Pink</td><td>White</td><td>Blue</td><td>Green</td></tr><tr><td>Number of dresses</td><td>6</td><td>4</td><td>3</td><td>2</td></tr></table> According to the results, complete the following pictogram and give it a title. (Title) Assessment focus: Give a title for the pictogram.	Title: Number of dresses in different colours at home
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M2-Q33(2)  Assessment focus: Construct pictograms using a one-to-one representation.	White: 4 pictures Blue: 3 pictures

Sub-paper 3 (3ME3)

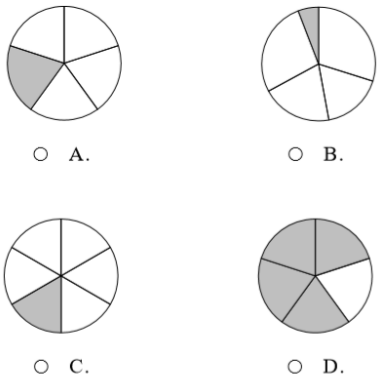
Learning Unit	Basic Competency Descriptor*	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M3-Q01 Write a 5-digit number according to the instructions below. The digit '5' is in the units place. The digit '6' is in the ten thousands place. The digit '4' is in the tens place. The digit '2' is in the thousands place. The digit '7' is in the hundreds place. Assessment focus: Recognize the place values: units, tens, hundreds, thousands and ten thousands.	62 745
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M3-Q02 Write an ***even number*** which is larger than 79 462 but smaller than 81 345. Answer: _____ Assessment focus: Write numbers up to 5 digits.	Accept any 5-digit even number between 79 464 and 81 344
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M3-Q03 In the number 75 902, the digit '5' stands for * 5 / 50 / 500 / 5 000 / 50 000 . (*Circle the answer) Assessment focus: Recognize the place value of thousands.	Circle '5 000'

* Please refer to the BCA website (http://cd1.edb.hkedcity.net/cd/eap_web/bca/index3.htm) for the Basic Competencies Descriptors documents

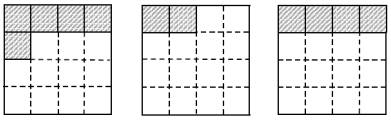
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M3-Q04 $248 + 354 =$ _____ Assessment focus: Perform addition.	602
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M3-Q05 $746 - 319 - 154 =$ _____ Assessment focus: Perform subtraction.	273
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M3-Q06 $253 \times 7 =$ _____ Assessment focus: Perform multiplication.	1771

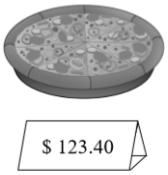
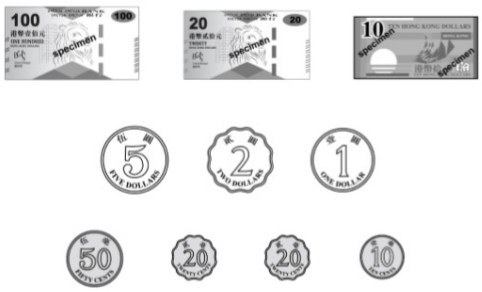
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M3-Q07 589 ÷ 8 = ○ A. 71…1 ○ B. 73 ○ C. 73…5 ○ D. 76…1 Assessment focus: Perform division.	A. B. C. Correct Answer D.
Four Arithmetic Operations	KS1-N2-3: Perform mixed operations of: (a) addition and subtraction, involving using brackets; (b) multiplication and addition, multiplication with numbers not greater than 10 (not involving using brackets); and (c) multiplication and subtraction, multiplication with numbers not greater than 10 (not involving using brackets) of three numbers at most.	3M3-Q08 869 − (82 + 39) = _____ Assessment focus: Perform mixed operations of addition and subtraction.	748

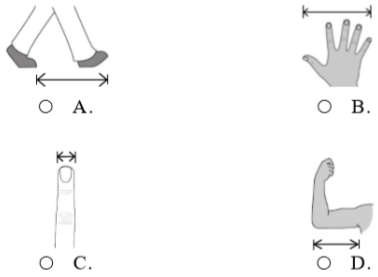
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M3-Q09 There are some packs of candies in a candy store. The shopkeeper sells 130 packs in the morning and 258 packs in the afternoon. There are 215 packs left. How many packs of candies are there at first? (Show your working) Assessment focus: Solve problems involving addition.	130 + 258 + 215 = 603 There are 603 packs of candies at first.
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M3-Q10 There are 6 bookshelves in the classroom. Each bookshelf can hold 28 books. They can hold _____ books altogether. Assessment focus: Solve problems involving multiplication.	168

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M3-Q11 Michael eats 4 lychees. Christy eats 3 times as many lychees as Michael. How many lychees do they eat altogether? (Show your working) Assessment focus: Solve problems involving mixed operations.	$4 + 4 \times 3$ $= 16$ They eat 16 lychees altogether.
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M3-Q12 Which figure below shows that $\frac{1}{5}$ of the whole is shaded?  ○ A. ○ B. ○ C. ○ D. Assessment focus: Recognize the concept of fractions as a part of one whole.	A. Correct Answer B. C. D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M3-Q13(a) Fill in the boxes with suitable numbers. (a) $\frac{3}{8}$ is smaller than $\frac{\square}{8}$. Assessment focus: Compare the magnitude of fractions with same denominators.	Accept any whole number larger than 3
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M3-Q13(b) (b) $\frac{11}{\square}$ is equal to 1. Assessment focus: Recognize the relationship between fractions and the whole.	11
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M3-Q14 There are some books on the bookshelf. $\frac{6}{13}$ of the whole are novels, $\frac{3}{13}$ of the whole are history books and $\frac{4}{13}$ of the whole are comics. The number of * novels / history books / comics is the fewest. (*Circle the answer) Assessment focus: Compare the magnitude of fractions with same denominators.	Circle 'history books'

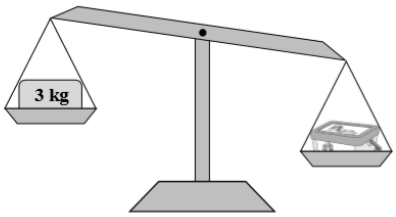
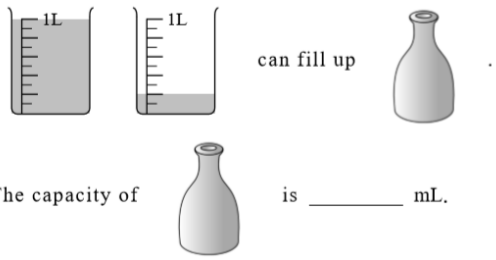
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-4 Perform addition and subtraction of three fractions with the same denominators at most (not involving performing mixed operations; results of addition must not be greater than 1; minuends in subtraction must not be greater than 1).	3M3-Q15  $\frac{5}{16} + \frac{2}{16} + \frac{4}{16} = \frac{\square}{\square}$ Assessment focus: Perform addition of three fractions with the same denominators at most.	11/16

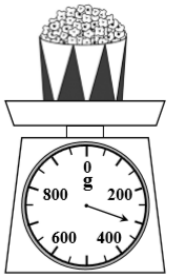
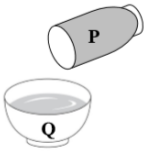
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M3-Q16(a)  (a) A pizza costs _____ dollars and _____ cents. Assessment focus: Read price tags.	123, 40 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M3-Q16(b) (b) Kelvin buys a pizza. Circle the amount he should pay.  Assessment focus: Use and exchange Hong Kong money.	Circle the amount of "$123.40"

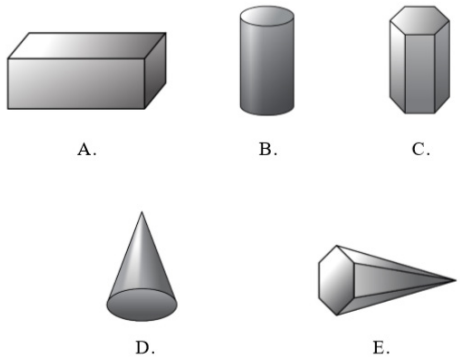
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-1 Compare the length of objects and the distance between objects directly.	3M3-Q17 Compare the lengths of the three objects below.  A is * longer / shorter than B. B is * longer / shorter than C. (*Circle the answer) Assessment focus: Compare the length of objects directly.	Circle "shorter" & "longer" respectively
Length and Distance	KS1-M2-5 Estimate the lengths of objects and the distances between objects with finger width, arm length, foot span, finger span, stride length, etc., as "ever-ready rulers".	3M3-Q18 Which of the following is most suitable for measuring the length of a football field?  Assessment focus: Choose appropriate 'ever-ready rulers' for measuring the length of objects.	A. Correct Answer B. C. D.

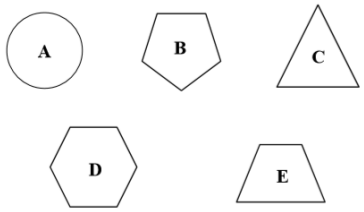
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Capacity	KS1-M5-4 Measure the capacities of containers with appropriate tools.	3M3-Q19  Which of the following is most suitable for measuring the capacity of a paper cup?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the capacity of containers with appropriate tools.	A. Correct Answer B. C. D.
Length and Distance	KS1-M2-7 Record the lengths of objects and the distances between objects in an appropriate single unit.	3M3-Q20 Fill in the following blank with a suitable unit.  The thickness of a slice of pizza is about 10 _____ . Assessment focus: Record the thickness of objects with an appropriate single unit.	millimetres / mm

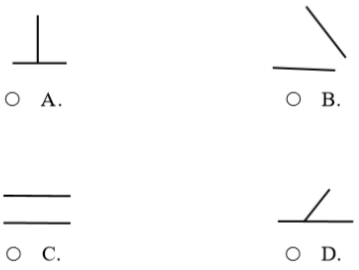
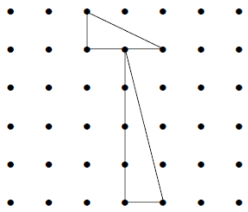
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	3M3-Q21(a)  The clock above shows the starting time of a dance lesson. (a) The dance lesson starts at _____ minute(s) past _____ in the afternoon. Assessment focus: Tell time from an analog clock.	25, 3 respectively
Time	KS1-M3-3 Record the duration of time for different activities in “hours”, “minutes” or “seconds”(not involving changing units).	3M3-Q21(b) (b) Susan arrives at the dance studio at  She arrives _____ minute(s) early. Assessment focus: Record the duration of time for different activities in ‘minutes’.	5

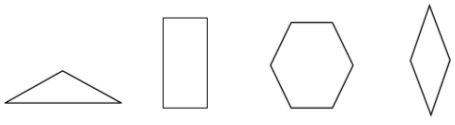
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-1 Compare directly the weights of objects.	3M3-Q22  The weight of  may be ○ A. 1 kg. ○ B. 2 kg. ○ C. 3 kg. ○ D. 4 kg. Assessment focus: Compare the weight of objects directly.	A. B. C. D. Correct Answer
Capacity	KS1-M5-3 Measure and compare the capacities of containers in “litre” (L) or “milliliter” (mL).	3M3-Q23  Assessment focus: Measure the capacities of containers in “millilitre” (mL).	1 200

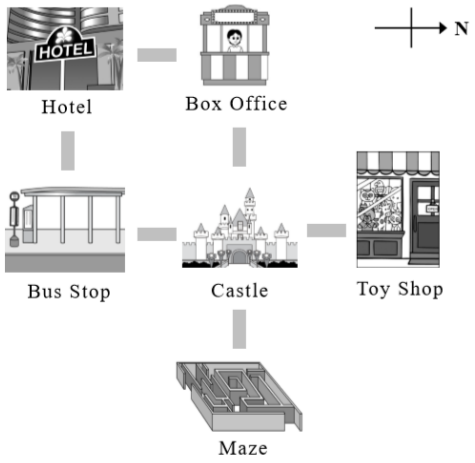
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M3-Q24  The weight of  is _____ g. Assessment focus: Measure the weight of objects using 'gram' (g).	300
Capacity	KS1-M5-1 Compare directly the capacities of containers.	3M3-Q25  Container **P** is filled up with water while Container **Q** is empty. We now pour all the water from Container **P** to Container **Q** and Container **Q** is not full. Which of the following is correct? ○ A. The capacities of **P** and **Q** are the same. ○ B. The capacity of **P** is greater than the capacity of **Q**. ○ C. The capacity of **P** is smaller than the capacity of **Q**. ○ D. The capacities of **P** and **Q** cannot be compared. Assessment focus: Compare directly the capacities of containers.	A. B. C. Correct Answer D.

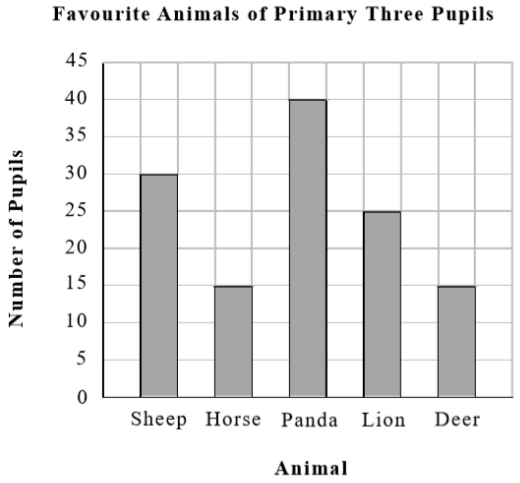
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M3-Q26(a) Study the 3-D shapes below. Write down all the letters for the answers.  A. B. C. D. E. List: (a) Prism(s): _____ Assessment focus: Identify prisms intuitively.	A，C
3D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M3-Q26(b) (b) Cone(s): _____ Assessment focus: Identify cones intuitively.	D

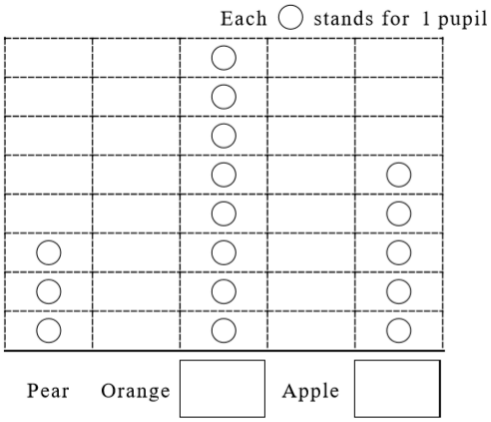
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M3-Q27(a) Study the 2-D shapes below. Write down all the letters for the answers.  List: (a) Hexagon(s): _____ Assessment focus: Identify hexagons intuitively.	D
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M3-Q27(b) (b) Circle(s): _____ Assessment focus: Identify circles intuitively.	A

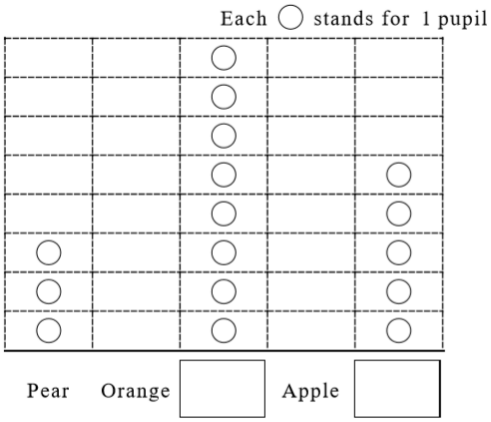
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M3-Q28 Which of the following figures is formed by a pair of parallel lines?  ○ A. ○ B. ○ C. ○ D. Assessment focus: Identify parallel lines.	A. B. C. Correct Answer D.
2-D Shapes	KS1-S2-2: Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	3M3-Q29  On the pin-board, David uses rubber bands to make ○ A. two right-angled triangles. ○ B. two isosceles triangles. ○ C. an isosceles triangle and a right-angled triangle. ○ D. an equilateral triangle and a right-angled triangle. Assessment focus: Identify right-angled triangles intuitively.	A. Correct Answer B. C. D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M3-Q30(a) Study the following figures. Write down all the letters for the answers.  A. B. C. D. (a) List the figure(s) with right angle(s). Answer: _____ Assessment focus: Identify right angles.	B
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M3-Q30(b) (b) List the figure(s) with acute angle(s). Answer: _____ Assessment focus: Identify acute angles.	A，D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M3-Q31(a) The location map of a theme park is shown below.  (a) * Box Office / Toy Shop / Maze is to the east of Castle. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Maze"
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M3-Q31(b) (b) Starting from Bus Stop, Tammy goes * east / south / west / north to reach Castle. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "north"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Bar Charts	KS1-D2-1 Interpret bar charts with a one-to-one, one-to-two or one-to-five representation.	3M3-Q32(a) Primary three pupils voted for their favourite animals with one person having one vote only.  (a) The number of pupils who favoured panda was _____ . Assessment focus: Interpret bar charts with a one-to-five representation.	40
Bar Charts	KS1-D2-1 Interpret bar charts with a one-to-one, one-to-two or one-to-five representation.	3M3-Q32(b) (b) There was the same number of pupils who favoured horse and _____ . The number of pupils who favoured each of these two kinds of animals was _____ . Assessment focus: Interpret bar charts with a one-to-five representation.	deer, 15 respectively

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(1) Ms Lee did a survey of the favourite kinds of fruit of P.3A pupils. Fruit / Pear / Orange / Mango / Apple / Peach Number of pupils / 3 / 6 / 8 / 2 / 5 According to the results, complete the following pictogram and give it a title. (Title) Assessment focus: Give a title for the pictogram.	Title: Favourite kinds of fruit of P.3A pupils
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(2)  Assessment focus: Construct pictograms using a one-to-one representation.	From left to right: Mango, Peach

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(3)  Assessment focus: Construct pictograms using a one-to-one representation.	Orange: 6 pictures Apple: 2 pictures

Sub-paper 4 (3ME4)

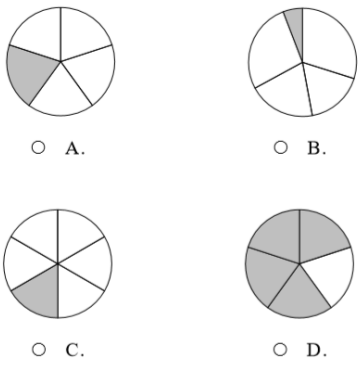
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M4-Q01 In which of the following numbers is the digit '2' in the tens place? ○ A. 7 942 ○ B. 21 446 ○ C. 32 783 ○ D. 37 824 Assessment focus: Recognize the place value of tens.	A. B. C. D. Correct Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M4-Q02 In the number 75 902, the digit '5' stands for * 5 / 50 / 500 / 5 000 / 50 000 . (*Circle the answer) Assessment focus: Recognize the place value of thousands.	Circle '5 000'
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M4-Q03 146 + 516 + 24 = ○ A. 662 ○ B. 676 ○ C. 686 ○ D. 902 Assessment focus: Perform addition.	A. B. C. Correct Answer D.

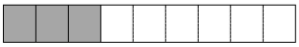
* Please refer to the BCA website (http://cd1.edb.hkedcity.net/cd/eap_web/bca/index3.htm) for the Basic Competencies Descriptors documents

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M4-Q04 560 − 246 − 46 = ○ A. 268 ○ B. 314 ○ C. 320 ○ D. 360 Assessment focus: Perform subtraction.	A. Correct Answer B. C. D.
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M4-Q05 5 × 614 = _____ Assessment focus: Perform multiplication.	3 070
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M4-Q06 589 ÷ 8 = ○ A. 71…1 ○ B. 73 ○ C. 73…5 ○ D. 76…1 Assessment focus: Perform division.	A. B. C. Correct Answer D.

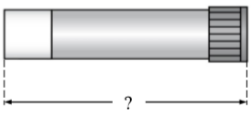
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-3: Perform mixed operations of: (a) addition and subtraction, involving using brackets; (b) multiplication and addition, multiplication with numbers not greater than 10 (not involving using brackets); and (c) multiplication and subtraction, multiplication with numbers not greater than 10 (not involving using brackets) of three numbers at most.	3M4-Q07 $28 - 6 \times 4 = \_\_\_\_\_$ Assessment focus: Perform mixed operations of multiplication and subtraction.	4
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q08 Alan has 285 dollars. He has 75 dollars less than Miffy. Miffy has ○ A. 210 dollars. ○ B. 350 dollars. ○ C. 360 dollars. ○ D. 645 dollars. Assessment focus: Solve problems involving addition.	A. B. C. Correct Answer D.
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q09 There are 8 pens in a box. Mr Chan buys 5 boxes of pens. There are 16 red pens and the remaining pens are blue. There are _____ blue pens. Assessment focus: Solve problems involving mixed operations.	24

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q10 Vincent needs 5 eggs to make a cake. Vincent has 521 eggs. He can make _____ cakes at most. Assessment focus: Solve problems involving division.	104
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q11 There are some packs of candies in a candy store. The shopkeeper sells 130 packs in the morning and 258 packs in the afternoon. There are 215 packs left. How many packs of candies are there at first? (Show your working) Assessment focus: Solve problems involving addition.	130 + 258 + 215 = 603 There are 603 packs of candies at first.
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q12  Hamburger 17 dollars 50 cents Ken pays with a 20-dollar note to buy a hamburger. He gets _____ dollars and _____ cents in change. Assessment focus: Solve problems involving subtraction in the calculation of money.	2, 50 respectively

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q13 There are 6 bookshelves in the classroom. Each bookshelf can hold 28 books. They can hold _____ books altogether. Assessment focus: Solve problems involving multiplication.	168
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M4-Q14 8 is * smaller than / equal to / larger than $\frac{8}{8}$. (*Circle the answer) Assessment focus: Recognize the relationship between fractions and the whole.	Circle 'larger than'
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M4-Q15 Which figure below shows that $\frac{1}{5}$ of the whole is shaded?  ○ A. ○ B. ○ C. ○ D. Assessment focus: Recognize the concept of fractions as a part of one whole.	A. Correct Answer B. C. D.

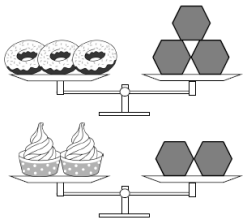
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M4-Q16 Arrange the following fractions from the smallest to the largest. $\frac{4}{7}$, $\frac{4}{9}$, $\frac{5}{7}$ Answer: ☐ , ☐ , ☐ (Smallest) (Largest) Assessment focus: Compare the magnitude of fractions with same denominators or same numerators.	$\frac{4}{9}$, $\frac{4}{7}$, $\frac{5}{7}$ respectively
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M4-Q17 Hillary and Andy have $\frac{8}{9}$ of a box of chocolate altogether. Hillary has $\frac{3}{9}$ of the box. How much of the box of chocolate does Andy have? They have:  Hillary has:  (Show your working) Assessment focus: Solve problems involving subtraction of fractions with the same denominators that are illustrated by diagrams.	$\frac{8}{9} - \frac{3}{9}$ $= \frac{5}{9}$ Andy has $\frac{5}{9}$ of the box of chocolate.

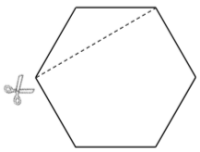
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M4-Q18(a)  (a) An ice cream costs _____ dollars and _____ cents. Assessment focus: Read price tags.	7, 60 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M4-Q18(b) (b) Paul pays  to buy an ice cream. Circle the change returned to Paul by the shopkeeper.  Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "$2.40"

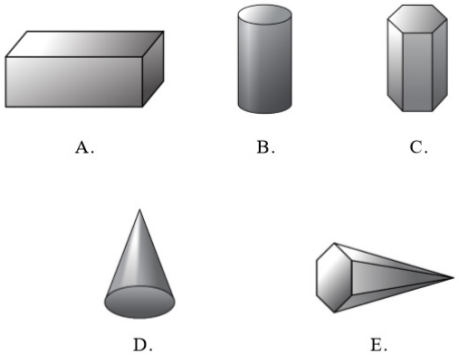
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-1 Identify the money in circulation in Hong Kong.	3M4-Q19 Linda pays the following amount for fruits.   Linda pays _____ dollars _____ cents for fruits. Assessment focus: Identify Hong Kong money.	27, 50 respectively
Length and Distance	KS1-M2-3 Measure and compare the lengths of objects and measure and compare the distances between objects in “millimeter” (mm), “centimeter” (cm) or “metre” (m).	3M4-Q20 Use a ruler to measure the length of the glue stick below.  The length of the glue stick is _____ cm. Assessment focus: Measure the length of objects using ‘centimetre’ (cm).	7

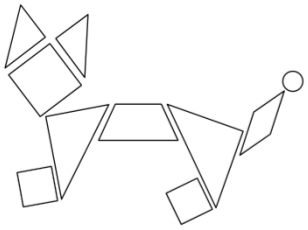
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-6 Measure the lengths of objects and the distances between objects with appropriate tools.	3M4-Q21 Which of the following is most suitable for measuring the length of a classroom display board?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure length of objects with appropriate measuring tools.	A. B. C. Correct Answer D.
Weight	KS1-M4-5 Record the weights of objects in an appropriate single unit.	3M4-Q22(a) Fill in the following blanks with suitable units. (a) The weight of a portable handheld fan is about 200 _____ . Assessment focus: Record the weight of objects with appropriate units.	grams / g

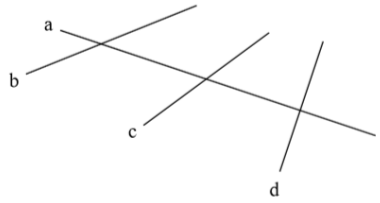
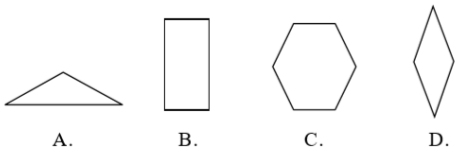
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-7 Record the lengths of objects and the distances between objects in an appropriate single unit.	3M4-Q22(b) (b) The length of a crayon is about 10 _____ . Assessment focus: Record the length of objects with an appropriate single unit.	centimetres / cm
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	3M4-Q23(a)  The clock above shows the starting time of a dance lesson. (a) The dance lesson starts at _____ minute(s) past _____ in the afternoon. Assessment focus: Tell time from an analog clock.	25, 3 respectively
Time	KS1-M3-3 Record the duration of time for different activities in “hours”, “minutes” or “seconds”(not involving changing units).	3M4-Q23(b) (b) Susan arrives at the dance studio at  She arrives _____ minute(s) early. Assessment focus: Record the duration of time for different activities in ‘minutes’.	5

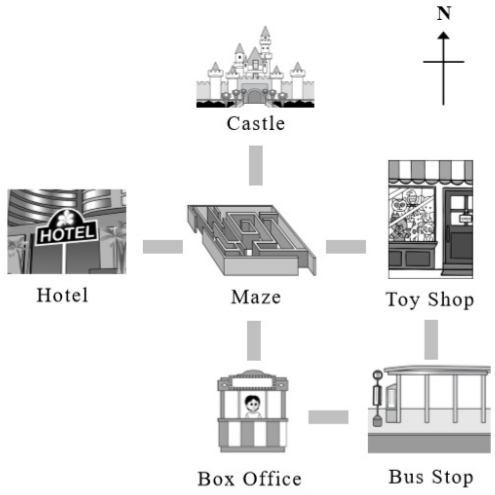
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-2 Compare the weights of objects in improvised units.	3M4-Q24  Study the diagram above. Which of the following is correct? ○ A.  is heavier than  . ○ B.  is heavier than  . ○ C.  and  weigh the same. ○ D. The weights of  and  cannot be compared. Assessment focus: Compare the weight of objects using improvised units.	A. B. C. Correct Answer D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Capacity	KS1-M5-4 Measure the capacities of containers with appropriate tools.	3M4-Q25  Which of the following is most suitable for measuring the capacity of a paper cup?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the capacity of containers with appropriate tools.	A. Correct Answer B. C. D.
2-D Shapes	KS1-S2-2: Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	3M4-Q26 The sides of the hexagon below are equal in length.  Sandy cuts the hexagon above along the dotted line. She gets one pentagon and one * right-angled / isosceles / equilateral triangle. (*Circle the answer) Assessment focus: Identify isosceles triangles intuitively.	Circle “isosceles”

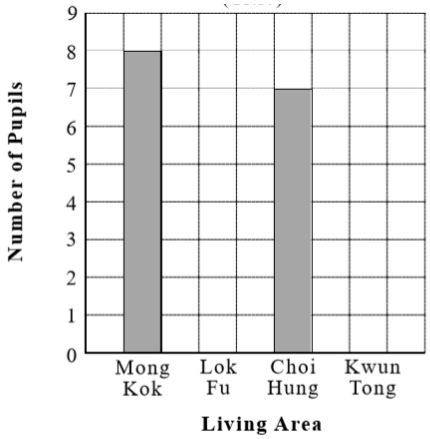
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M4-Q27(a) Study the 3-D shapes below. Write down all the letters for the answers.  List: (a) Prism(s): _____ Assessment focus: Identify prisms intuitively.	A，C
3-D Shapes	KS1-S1-1: Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M4-Q27(b) (b) Cone(s): _____ Assessment focus: Identify cones intuitively.	D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M4-Q28(a) Christine uses different 2-D shapes to form a picture.  (a) There is / are _____ triangle(s) in the picture above. Assessment focus: Identify triangles intuitively.	4
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M4-Q28(b) (b) There is / are _____ square(s) in the picture above. Assessment focus: Identify squares intuitively.	3

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M4-Q29 Study the following figure. Write down the letters for the answers.  Lines _____ and _____ are a pair of perpendicular lines. Assessment focus: Identify perpendicular lines.	a, d / d, a
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M4-Q30(a) Study the following figures. Write down all the letters for the answers.  (a) List the figure(s) with right angle(s). Answer: _____ Assessment focus: Identify right angles.	B
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M4-Q30(b) (b) List the figure(s) with acute angle(s). Answer: _____ Assessment focus: Identify acute angles.	A，D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M4-Q31(a) The location map of a theme park is shown below.  (a) Starting from Maze, Keith goes west to reach * Toy Shop / Castle / Hotel . (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Hotel"
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M4-Q31(b) (b) Bus Stop is to the * east / south / west / north of Toy Shop. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "south"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M4-Q32(a) Ms Chan did a survey of the number of pupils in each primary three class taking the school bus. **Number of Pupils in Each Primary Three Class Taking the School Bus** Each ☺ stands for 1 pupil  (a) The number of pupils in Class _____ taking the school bus was the most. There were _____ pupils. Assessment focus: Interpret pictograms with a one-to-one representation.	3C, 7 Respectively
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M4-Q32(b) (b) The total number of primary three pupils taking the school bus was _____ . Assessment focus: Interpret pictograms with a one-to-one representation.	22

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M4-Q33(a) Mr Cheung did a survey of the living areas of P.3D pupils. (a) According to the record, complete the table below. Living Area / Mong Kok / Lok Fu / Choi Hung / Kwun Tong Record / 𝍸 | / | / 𝍸 || / 𝍸 Number of pupils / / 3 / / 5 Assessment focus: Complete the information in a table according to the record of a survey.	8, 7 respectively
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M4-Q33(b)(1) (b) According to the results, use a pencil to complete the following bar chart and give it a title. (Title) Assessment focus: Give a title for the bar chart.	Title: Living Areas of P.3D Pupils
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M4-Q33(b)(2)  Assessment focus: Construct bar charts using a one-to-one representation.	Lok Fu: 3 boxes Kwun Tong: 5 boxes