Basic Competency Assessment Research Study 2017 (Primary 3)
Assessment Design
Mathematics

Design Rationale

- The Primary 3 Assessment is designed with reference to the prevailing Mathematics Curriculum Guide (P1–P6) and the Mathematics Curriculum – The Basic Competency of Key Stage 1. The Assessment covers the four dimensions 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 dimensions, 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 2017 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)

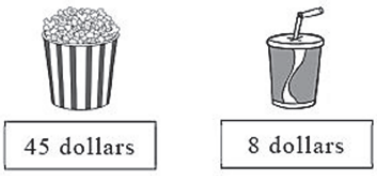
Learning Objective	Basic Competency*	Item Number	Option / Answer
Recognize the place values: units, tens, hundreds, thousands and ten thousands.	KS1-N1-1 Recognize the place values: units, tens, hundreds, thousands and ten thousands.	3M1-Q01 In which of the following numbers is the digit '6' in the tens place? ○ A. 18 246 ○ B. 28 461 ○ C. 48 612 ○ D. 68 124 Assessment focus: Recognize the place value of tens.	A. B. Correct Answer C. D.
Read, write and order numbers up to 5 digits.	KS1-N1-2 Read, write and order numbers up to 5 digits.	3M1-Q02 The following table shows the number of people admitted to the Fun Fair each day. Day 1 / Day 2 / Day 3 Number of people: 10 789 / 9 988 / 12 300 Arrange the number of people from the smallest to the largest. Answer: _____ (Smallest) , _____ , _____ (Largest) Assessment focus: Order numbers up to 5 digits.	9 988, 10 789, 12 300 respectively
Read, write and order numbers up to 5 digits.	KS1-N1-2 Read, write and order numbers up to 5 digits.	3M1-Q03 Write 'twenty thousand and sixty-eight' in numerals. Answer: _____ Assessment focus: Write numbers up to 5 digits.	20 068

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

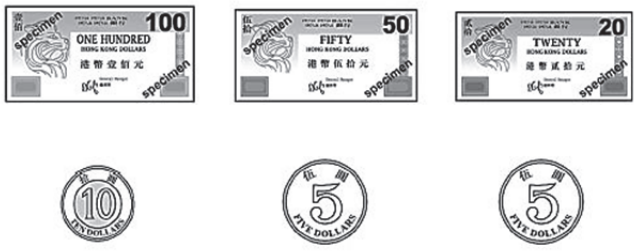
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform addition.	KS1-N2-1 Perform addition (with numbers up to 3 digits, not involving carrying in three steps but involving the commutative and associative properties of addition).	3M1-Q04 $58 + 198 =$ _____ Assessment focus: Perform addition.	256
Perform subtraction.	KS1-N2-2 Perform subtraction (with numbers up to 3 digits).	3M1-Q05 $824 - 129 =$ _____ Assessment focus: Perform subtraction.	695
Perform subtraction.	KS1-N2-2 Perform subtraction (with numbers up to 3 digits).	3M1-Q06 $679 - 245 - 28 =$ ○ A. 154 ○ B. 406 ○ C. 416 ○ D. 434 Assessment focus: Perform subtraction.	A. B. Correct Answer C. D.
Perform multiplication.	KS1-N2-3 Perform multiplication (with numbers up to 1 digit by 3 digits, involving the commutative property of multiplication).	3M1-Q07 $415 \times 6 =$ _____ Assessment focus: Perform multiplication.	2 490

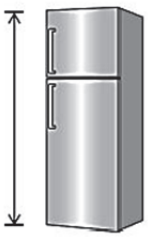
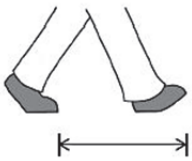
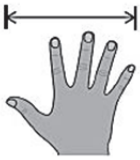
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform division.	KS1-N2-4 Perform division (with divisor 1 digit and dividend 3 digits).	3M1-Q08 $648 \div 3 =$ _____ Assessment focus: Perform division.	216
Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	KS1-N2-5 Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	3M1-Q09 $11 + 9 \times 6 =$ ○ A. 20 ○ B. 54 ○ C. 65 ○ D. 120 Assessment focus: Perform mixed operations of multiplication and addition.	A. B. C. Correct Answer D.
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M1-Q10 There are 32 pieces in each set of Chess. The total number of pieces in 8 sets of Chess is _____ . Assessment focus: Solve problems involving multiplication.	256

Learning Objective	Basic Competency	Item Number	Option / Answer
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M1-Q11 Mr Chan swims for 182 minutes in 7 days. On average, he swims for _____ minutes each day. Assessment focus: Solve problems involving division.	26
Solve problems involving mixed operations.	KS1-N2-6: Solve problems involving mixed operations.	3M1-Q12 There are 250 people on a train originally. When the train arrives at a station, 135 people get off and 64 people get on. There are _____ people on the train now. Assessment focus: Solve problems involving mixed operations.	179
Solve problems involving addition, subtraction, multiplication and division in the calculation of money.	KS1-N2-7 Solve problems involving addition, subtraction, multiplication and division in the calculation of money (not involving mixed operations).	3M1-Q13  20 dollars and 80 cents Mary buys 2 pencil cases. She should pay _____ dollars and _____ cents. Assessment focus: Solve problems involving multiplication in the calculation of money.	41, 60 respectively

Learning Objective	Basic Competency	Item Number	Option / Answer
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M1-Q14  Brian buys 1 cup of popcorn and 4 cups of soft drink. How much should he pay altogether? (Show your working) Assessment focus: Solve problems involving mixed operations.	$45 + 8 \times 4$ $= 77$ He should pay 77 dollars altogether.
Understand the concept of fractions as a part of one whole.	KS1-N3-1 Understand the concept of fractions as a part of one whole.	3M1-Q15 In the following figure, what fraction of the whole is shaded?  Answer: $\frac{\square}{\square}$ of the whole is shaded. Assessment focus: Understand the concept of fractions as a part of one whole.	$\frac{5}{6}$

Learning Objective	Basic Competency	Item Number	Option / Answer
Understand the concept of fractions as a part of one whole.	KS1-N3-1 Understand the concept of fractions as a part of one whole.	3M1-Q16(a) Joe has 6 sweets. $\frac{2}{3}$ of the whole are milk sweets. The rest are fruit sweets.  (a) The number of milk sweets is _____ . Assessment focus: Understand the concept of fractions as a part of one whole.	4
Understand the concept of fractions as a part of one whole.	KS1-N3-1 Understand the concept of fractions as a part of one whole.	3M1-Q16(b) (b) $\frac{\square}{\square}$ of the whole are fruit sweets. Assessment focus: Understand the concept of fractions as a part of one whole.	Accept $\frac{1}{3}$, $\frac{2}{6}$

Learning Objective	Basic Competency	Item Number	Option / Answer
Read price tags.	KS1-M1-2 Read price tags.	3M1-Q17(a)  (a) An ice-cream bar costs _____ dollars and _____ cents. Assessment focus: Read price tags.	9, 30 respectively
Exchange and use money.	KS1-M1-3 Exchange and use money.	3M1-Q17(b) (b) Jimmy pays  to buy an ice-cream bar. Circle the change returned to Jimmy by the shopkeeper.  Assessment focus: Use Hong Kong money.	Circle an amount of '$0.70'
Identify Hong Kong money.	KS1-M1-1 Identify Hong Kong money.	3M1-Q18 Mr Lam pays the following amount to buy a gift.  Mr Lam pays _____ dollars for the gift. Assessment focus: Identify Hong Kong money.	190

Learning Objective	Basic Competency	Item Number	Option / Answer
Record the length of objects and the distance between objects with an appropriate single unit.	KS1-M2-7 Record the length of objects and the distance between objects with an appropriate single unit.	3M1-Q19(a) Fill in the following blanks with suitable units. (a) A toothbrush  is about 16 _____ long. Assessment focus: Record the length of objects with an appropriate single unit.	centimetres / cm
Record the weight of objects with appropriate units.	KS1-M4-5 Record the weight of objects with appropriate units.	3M1-Q19(b) (b) An apple  weighs about 200 _____. Assessment focus: Record the weight of objects with appropriate units.	grams / g
Use 'ever-ready rulers' to measure the length of objects and the distance between objects	KS1-M2-5 Measure the length of objects and the distance between objects with finger width, arm length, foot span, finger span, stride length, etc., as 'ever-ready rulers'.	3M1-Q20  Which of the following is most suitable for measuring the height of a refrigerator?  O A.  O B.  O C.  O D. Assessment focus: Choose appropriate 'ever-ready rulers' for measuring the length of objects.	A. B. C. D. Correct Answer

<table>
<tr><th>Learning Objective</th><th>Basic Competency</th><th>Item Number</th><th>Option / Answer</th></tr>
<tr>
<td>Tell the dates and days of a week.</td>
<td>KS1-M3-1
Tell the dates and days of a week.</td>
<td>3M1-Q21(a)

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

<table>
<tr><th colspan="7">November</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></td><td>1</td><td>2</td></tr>
<tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr>
<tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr>
<tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr>
<tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr>
</table>

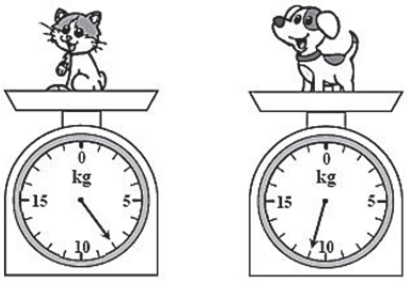
(a) The school picnic is held on the fourth Friday of November.
That day is the _____ of _____ .
(month)

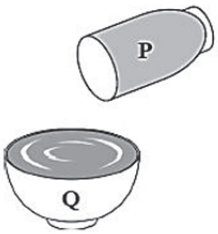
Assessment focus:
Tell the dates.</td>
<td>22nd, November respectively</td>
</tr>
<tr>
<td>Tell the dates and days of a week.</td>
<td>KS1-M3-1
Tell the dates and days of a week.</td>
<td>3M1-Q21(b)

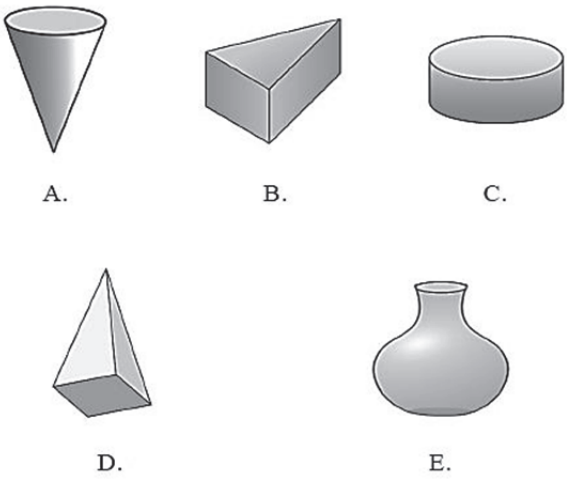
(b) The penmanship competition is held on the 18th of November.
That day is _____ .
(day of the week)

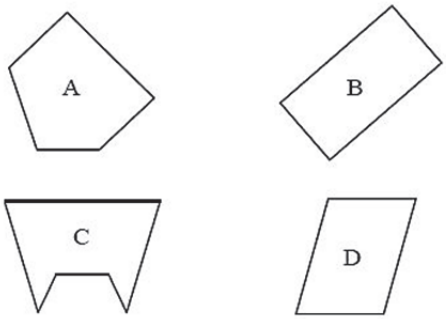
Assessment focus:
Tell the days of a week.</td>
<td>Monday</td>
</tr>
</table>

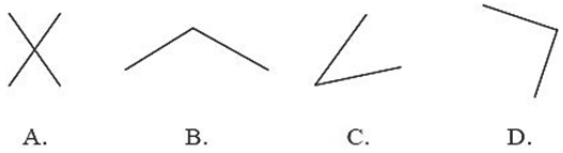
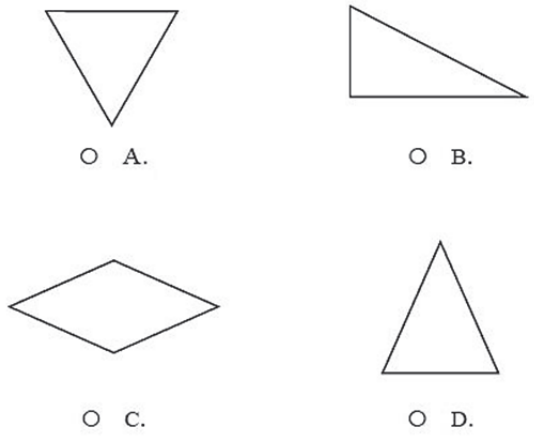
Learning Objective	Basic Competency	Item Number	Option / Answer
Tell time from a clock face and a digital clock.	KS1-M3-2 Tell time from a clock face and a digital clock.	3M1-Q22(a) The two clocks below show the starting time and the finishing time of a quiz.  Starting Time  Finishing Time (a) The quiz starts at _____ minute(s) past _____ in the morning. Assessment focus: Tell time from a clock face.	15, 10 respectively
Record the duration of time for different activities using 'hours and minutes', 'minutes and seconds' or 'seconds'.	KS1-M3-3 Record the duration of time for different activities using 'hours and minutes', 'minutes and seconds' or 'seconds' (not involving changing units).	3M1-Q22(b) (b) The time is 10:25 a.m. now. The quiz has _____ minute(s) left. Assessment focus: Record the duration of time for activities using 'hours and minutes'.	5

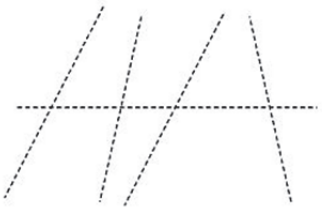
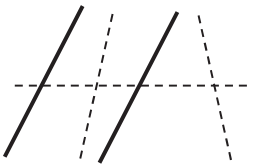
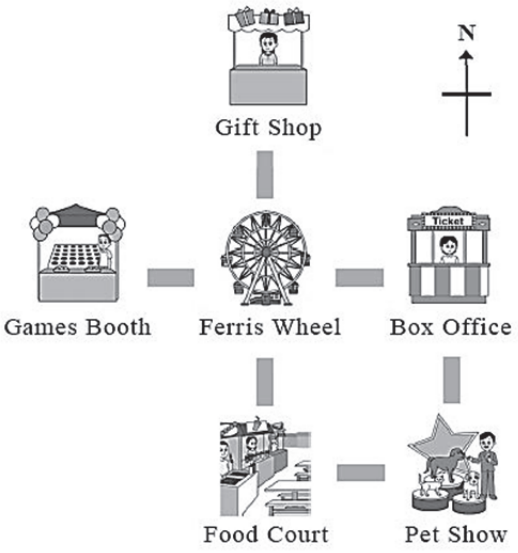
Learning Objective	Basic Competency	Item Number	Option / Answer
Measure and compare the weight of objects using ‘gram’(g) or ‘kilogram’ (kg).	KS1-M4-3 Measure and compare the weight of objects using ‘gram’(g) or ‘kilogram’ (kg).	3M1-Q23(a)  (a) The weight of  is _____ kg. Assessment focus: Measure the weight of objects using ‘kilogram’ (kg).	8
Measure and compare the weight of objects using ‘gram’(g) or ‘kilogram’ (kg).	KS1-M4-3 Measure and compare the weight of objects using ‘gram’(g) or ‘kilogram’ (kg).	3M1-Q23(b) (b)  is _____ kg * lighter / heavier than  . (*Circle the answer) Assessment focus: Measure and compare the weight of objects using ‘kilogram’ (kg).	3, circle ‘lighter’ respectively

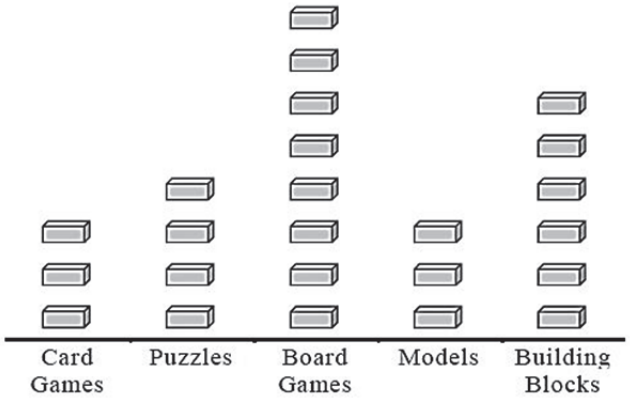
Learning Objective	Basic Competency	Item Number	Option / Answer
Compare the capacity of containers directly.	KS1-M5-1 Compare the capacity of containers directly.	3M1-Q24  Fill up the container **P** with water and then pour all the water into the empty container **Q**. The container **Q** is just filled up with the water. 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 the capacity of containers directly.	A. Correct Answer B. C. D.
Identify prisms, pyramids and spheres.	KS1-S1-1 Identify prisms, pyramids and spheres.	3M1-Q25 The 3-D shape on the right is a ○ A. prism. ○ B. pyramid. ○ C. cylinder. ○ D. cone.  Assessment focus: Identify prisms / cylinders.	A. B. C. Correct Answer D.

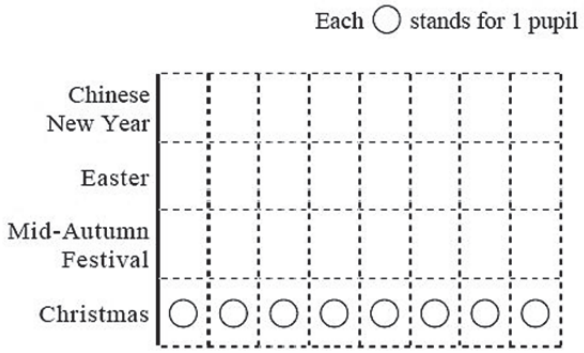
Learning Objective	Basic Competency	Item Number	Option / Answer
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M1-Q26(a) Follow the instruction. Write down all the letters for the answers.  A. B. C. D. E. List: (a) Prism(s): _____ Assessment focus: Group 3-D shapes.	B
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M1-Q26(b) (b) Cone(s): _____ Assessment focus: Group 3-D shapes.	A

Learning Objective	Basic Competency	Item Number	Option / Answer
Group 2-D shapes.	KS1-S2-3 Group 2-D shapes.	3M1-Q27(a) Study the 2-D shapes below. Write down all the letters for the answers.  List: (a) Hexagon(s): _____ Assessment focus: Group 2-D shapes.	C
Group 2-D shapes.	KS1-S2-3 Group 2-D shapes.	3M1-Q27(b) (b) Rectangle(s): _____ Assessment focus: Group 2-D shapes.	B

Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize angles and right angles.	KS1-S4-1 Recognize angles and right angles.	3M1-Q28 Study the following figures. Write down the letter(s) for the answer.  A. B. C. D. List the figure(s) with right angle(s). Answer: _____ Assessment focus: Recognize right angles.	D
Recognize the simple characteristics of triangles.	KS1-S2-2 Recognize the simple characteristics of triangles (e.g. 3 sides, 3 angles), including right-angled triangles, isosceles triangles and equilateral triangles.	3M1-Q29 Which of the following is an equilateral triangle?  ○ A. ○ B. ○ C. ○ D. Assessment focus: Recognize the simple characteristics of triangles, including right-angled triangles, isosceles triangles and equilateral triangles.	A

Learning Objective	Basic Competency	Item Number	Option / Answer
Identify straight lines, curves, parallel lines and perpendicular lines.	KS1-S3-1 Identify straight lines, curves, 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.	
Recognize the four directions: east, south, west and north, with the use of compass.	KS1-S5-1 Recognize the four directions: east, south, west and north, with the use of compass.	3M1-Q31(a) The map of a fun fair is shown below.  (a) Starting from Box Office, Tim goes _____ (direction) to see the Pet Show. Assessment focus: Recognize the four directions: east, south, west and north with the concept of use of compass.	south

Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the four directions: east, south, west and north, with the use of compass.	KS1-S5-1 Recognize the four directions: east, south, west and north, with the use of compass.	3M1-Q31(b) (b) * Box Office / Food Court / Games Booth is to the west of Ferris Wheel. (*Circle the answer) Assessment focus: Recognize the four directions: east, south, west and north with the concept of use of compass.	Circle 'Games Booth'
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M1-Q32(a) Kitty did a survey of the number of different kinds of toys in a play room. **Number of Different Kinds of Toys in the Play Room** Each  stands for 1 box  (a) There are _____ boxes of puzzles in the play room. Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	4
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M1-Q32(b) (b) The difference between the number of boxes of board games and that of building blocks is _____ . Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	2

Learning Objective	Basic Competency	Item Number	Option / Answer
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M1-Q33(1) The pupils of P.3B voted for their favourite festivals with one person, one vote. The results are as follows: Festival / Chinese New Year / Easter / Mid-Autumn Festival / Christmas Number of pupils / 6 / 3 / 4 / 8 According to the results, complete the following pictogram and give it a title. (Title) Assessment focus: Give a title for the pictogram.	Title: Favourite Festivals of P.3B pupils
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M1-Q33(2)  Assessment focus: Construct pictograms using a one-to-one representation.	Chinese New Year: 6 pictures Easter: 3 pictures Mid-Autumn Festival: 4 pictures

Sub-paper 2 (3ME2)

Learning Objective	Basic Competency*	Item Number	Option / Answer
Recognize the place values: units, tens, hundreds, thousands and ten thousands.	KS1-N1-1 Recognize the place values: units, tens, hundreds, thousands and ten thousands.	3M2-Q01 In which of the following numbers is the digit '6' in the tens place? ○ A. 18 246 ○ B. 28 461 ○ C. 48 612 ○ D. 68 124 Assessment focus: Recognize the place value of tens.	A. B. Correct Answer C. D.
Recognize the place values: units, tens, hundreds, thousands and ten thousands.	KS1-N1-1 Recognize the place values: units, tens, hundreds, thousands and ten thousands.	3M2-Q02 In the number 93 715, the digit '3' stands for * 3 / 30 / 300 / 3 000 / 30 000 . (*Circle the answer) Assessment focus: Recognize the place value of thousands.	Circle '3 000'
Read, write and order numbers up to 5 digits.	KS1-N1-2 Read, write and order numbers up to 5 digits.	3M2-Q03 Write 'twenty thousand and sixty-eight' in numerals. Answer: _____ Assessment focus: Write numbers up to 5 digits.	20 068

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

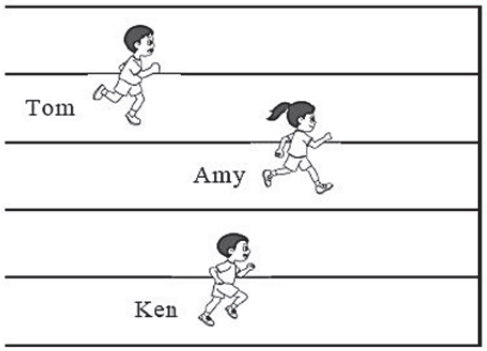
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform addition.	KS1-N2-1 Perform addition (with numbers up to 3 digits, not involving carrying in three steps but involving the commutative and associative properties of addition).	3M2-Q04 $58 + 198 = \_\_\_\_\_$ Assessment focus: Perform addition.	256
Perform subtraction.	KS1-N2-2 Perform subtraction (with numbers up to 3 digits).	3M2-Q05 $824 - 129 = \_\_\_\_\_$ Assessment focus: Perform subtraction.	695
Perform multiplication.	KS1-N2-3 Perform multiplication (with numbers up to 1 digit by 3 digits, involving the commutative property of multiplication).	3M2-Q06 $6 \times 415 = \_\_\_\_\_$ Assessment focus: Perform multiplication.	2490
Perform division.	KS1-N2-4 Perform division (with divisor 1 digit and dividend 3 digits).	3M2-Q07 $648 \div 3 = \_\_\_\_\_$ Assessment focus: Perform division.	216

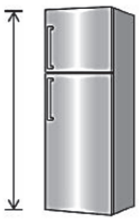
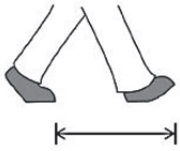
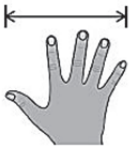
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	KS1-N2-5 Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	3M2-Q08 $11 + 9 \times 6 =$ ○ A. 20 ○ B. 54 ○ C. 65 ○ D. 120 Assessment focus: Perform mixed operations of multiplication and addition.	A. B. C. Correct Answer D.
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M2-Q09 Each pupil gets 5 pieces of drawing paper. 75 pupils get _____ pieces of drawing paper altogether. Assessment focus: Solve problems involving multiplication.	375
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M2-Q10 In Primary One to Primary Three, there are 329 pupils altogether. There are 96 Primary One pupils and 107 Primary Two pupils. How many Primary Three pupils are there? (Show your working) Assessment focus: Solve problems involving mixed operations.	329 – 96 – 107 = 126 There are 126 Primary Three pupils.

Learning Objective	Basic Competency	Item Number	Option / Answer
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M2-Q11 There are 140 buns in a bakery. The shopkeeper packs every 4 buns in one bag. How many bags can he pack altogether? (Show your working) Assessment focus: Solve problems involving division.	140 ÷ 4 = 35 He can pack 35 bags altogether.
Understand the concept of fractions as a part of one whole.	KS1-N3-1 Understand the concept of fractions as a part of one whole.	3M2-Q12 In the following figure, what fraction of the whole is shaded?  ○ A. $\frac{3}{8}$ ○ B. $\frac{3}{5}$ ○ C. $\frac{5}{8}$ ○ D. $\frac{5}{9}$ Assessment focus: Understand the concept of fractions as a part of one whole.	A. B. C. Correct Answer D.

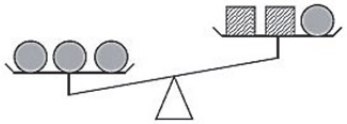
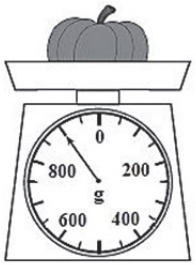
Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the relationship between fractions and the whole.	KS1-N3-2 Recognize the relationship between fractions and the whole.	3M2-Q13(a) (a) $\frac{3}{3}$ is * smaller than / equal to / larger than $\frac{2}{2}$. (*Circle the answer) Assessment focus: Recognize the relationship between fractions and the whole.	Circle 'equal to'
Compare fractions with same denominators or same numerators.	KS1-N3-3 Compare fractions with same denominators or same numerators.	3M2-Q13(b) (b) Fill in the box with a suitable number. $\frac{\square}{13}$ is larger than $\frac{6}{13}$. Assessment focus: Compare fractions with same denominators.	Accept any whole number larger than 6
Compare fractions with same denominators or same numerators.	KS1-N3-3 Compare fractions with same denominators or same numerators.	3M2-Q14 Father buys a bottle of milk. Kitty drinks $\frac{5}{11}$ of the whole, Charles drinks $\frac{2}{11}$ of the whole and Linda drinks $\frac{4}{11}$ of the whole. Who drinks the least milk? Answer: * Kitty / Charles / Linda drinks the least milk. (*Circle the answer) Assessment focus: Compare fractions with same denominators.	Circle 'Charles'

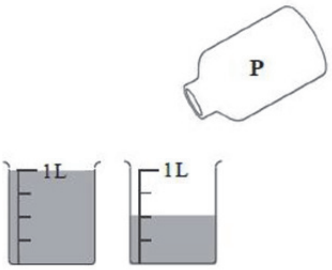
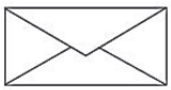
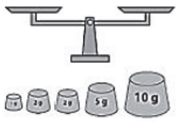
Learning Objective	Basic Competency	Item Number	Option / Answer
Read price tags.	KS1-M1-2 Read price tags.	3M2-Q15(a)  (a) A  costs _____ dollars and _____ cents. Assessment focus: Read price tags.	67, 50 respectively
Exchange and use money.	KS1-M1-3 Exchange and use money.	3M2-Q15(b) (b) Ryan buys a  . Circle the amount he should pay.    Assessment focus: Use Hong Kong money.	Circle an amount of '$67.50'

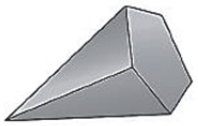
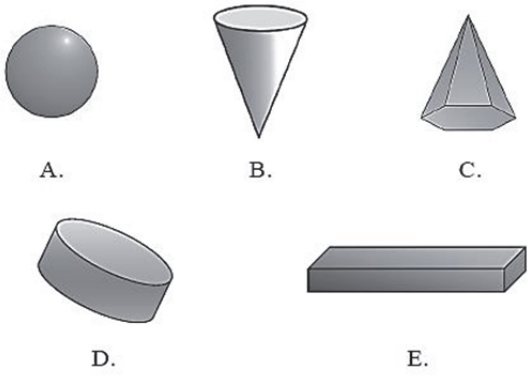
Learning Objective	Basic Competency	Item Number	Option / Answer
Compare the length of objects and the distance between objects directly.	KS1-M2-1 Compare the length of objects and the distance between objects directly.	3M2-Q16  Tom, Amy and Ken are taking part in a 100-metre race. In the above figure, * Tom / Amy / Ken is nearest to the finishing line. (*Circle the answer) Assessment focus: Compare the distance between objects directly.	Circle 'Amy'
Record the length of objects and the distance between objects with an appropriate single unit.	KS1-M2-7 Record the length of objects and the distance between objects with an appropriate single unit.	3M2-Q17(a) Fill in the following blanks with suitable units. (a) A toothbrush  is about 16 _____ long. Assessment focus: Record the length of objects with an appropriate single unit.	centimetres / cm
Record the weight of objects with appropriate units.	KS1-M4-5 Record the weight of objects with appropriate units.	3M2-Q17(b) (b) An apple  weighs about 200 _____. Assessment focus: Record the weight of objects with appropriate units.	grams / g

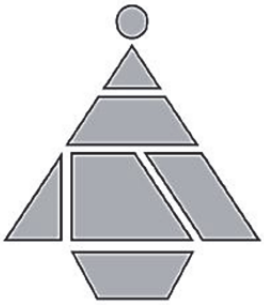
Learning Objective	Basic Competency	Item Number	Option / Answer
Use ‘ever-ready rulers’ to measure the length of objects and the distance between objects	KS1-M2-5 Measure the length of objects and the distance between objects with finger width, arm length, foot span, finger span, stride length, etc., as ‘ever-ready rulers’.	3M2-Q18  Which of the following is most suitable for measuring the height of a refrigerator?  O A.  O B.  O C.  O D. Assessment focus: Choose appropriate ‘ever-ready rulers’ for measuring the length of objects.	A. B. C. D. Correct Answer
Tell the dates and days of a week.	KS1-M3-1 Tell the dates and days of a week.	3M2-Q19(a) Answer the following questions according to the calendar for May below. **May** Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | | 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 | | | (a) The second Sunday of May is Mother’s Day. That day is the _____ of _____ . (month) Assessment focus: Tell the dates.	14^{th}, May respectively

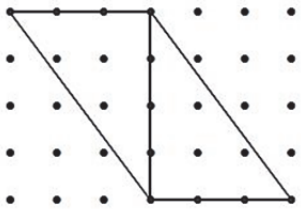
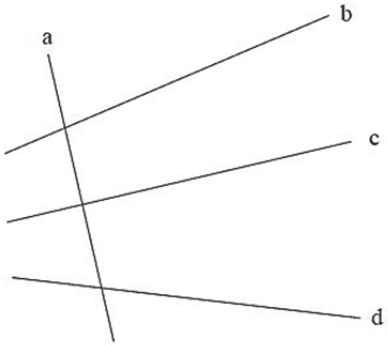
Learning Objective	Basic Competency	Item Number	Option / Answer
Tell the dates and days of a week.	KS1-M3-1 Tell the dates and days of a week.	3M2-Q19(b) (b) The last day of May is _____ . (day of the week) Assessment focus: Tell the days of a week.	Wednesday
Tell time from a clock face and a digital clock.	KS1-M3-2 Tell time from a clock face and a digital clock.	3M2-Q20(a) The two clocks below show the starting time and the finishing time of a quiz.  Starting Time Finishing Time (a) The quiz starts at _____ minute(s) past _____ in the morning. Assessment focus: Tell time from a clock face.	15, 10 respectively
Record the duration of time for different activities using 'hours and minutes', 'minutes and seconds' or 'seconds'.	KS1-M3-3 Record the duration of time for different activities using 'hours and minutes', 'minutes and seconds' or 'seconds' (not involving changing units).	3M2-Q20(b) (b) The time is 10:25 a.m. now. The quiz has _____ minute(s) left. Assessment focus: Record the duration of time for activities using 'hours and minutes'.	5

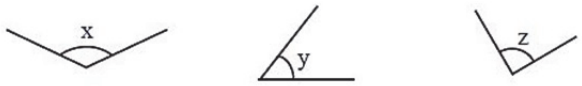
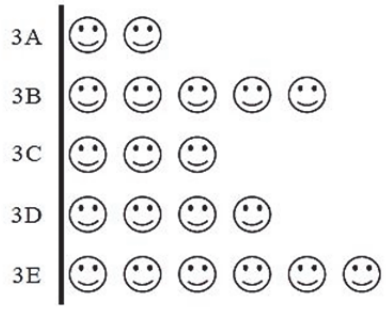
Learning Objective	Basic Competency	Item Number	Option / Answer
Compare the weight of objects directly.	KS1-M4-1 Compare the weight of objects directly.	3M2-Q21  Study the diagram above. Which of the following is correct? ○ A. ● and ▨ weigh the same. ○ B. ▨ is lighter than ● . ○ C. ● is lighter than ▨ . ○ D. The weights of ● and ▨ cannot be compared. Assessment focus: Compare the weight of objects directly.	A. B. Correct Answer C. D.
Measure and compare the weight of objects using ‘gram’(g) or ‘kilogram’ (kg).	KS1-M4-3 Measure and compare the weight of objects using ‘gram’(g) or ‘kilogram’ (kg).	3M2-Q22   The weight of is _____ grams. Assessment focus: Measure the weight of objects using ‘gram’ (g).	900

Learning Objective	Basic Competency	Item Number	Option / Answer
Measure and compare the capacity of containers using 'litre' (L) or 'millilitre' (mL).	KS1-M5-3 Measure and compare the capacity of containers using 'litre' (L) or 'millilitre' (mL).	3M2-Q23 Fill up container **P** with water. Then pour all the water into two empty measuring cups.  The capacity of container **P** is _____ mL. Assessment focus: Measure the capacity of containers using 'litre' (L) or 'millilitre' (mL).	1 500
Measure the length of objects and the distance between objects with appropriate measuring tools.	KS1-M2-6 Measure with appropriate measuring tools.	3M2-Q24  Which of the following is most suitable for measuring the length of an envelope?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the length of an object with appropriate measuring tools.	A. Correct Answer B. C. D.

Learning Objective	Basic Competency	Item Number	Option / Answer
Identify prisms, pyramids and spheres.	KS1-S1-1 Identify prisms, pyramids and spheres.	3M2-Q25 The 3-D shape on the right is a ○ A. pentagon. ○ B. prism. ○ C. cone. ○ D. pyramid.  Assessment focus: Identify pyramids / cones.	A. B. C. D. Correct Answer
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M2-Q26(a) Follow the instruction. Write down all the letters for the answers.  A. B. C. D. E. List: (a) Cylinder(s): _____ Assessment focus: Group 3-D shapes.	D
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M2-Q26(b) (b) Sphere(s): _____ Assessment focus: Group 3-D shapes.	A

Learning Objective	Basic Competency	Item Number	Option / Answer
Compare objects according to their lengths, widths, heights and thicknesses.	KS1-S1-3 Compare objects according to their lengths, widths, heights and thicknesses.	3M2-Q27  Roll cake Compact disc 10-dollar coin Study the figures above. Which object is the thinnest? Answer: * Roll cake / Compact disc / 10-dollar coin is the thinnest. (*Circle the answer) Assessment focus: Compare objects according to their thicknesses.	Circle 'Compact disc'
Identify 2-D shapes intuitively.	KS1-S2-1 Identify 2-D shapes intuitively: triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles, rhombuses and circles.	3M2-Q28(a) Lucy uses different 2-D shapes to form a picture.  (a) There is / are _____ parallelogram(s) in the picture above. Assessment focus: Identify parallelograms.	1
Identify 2-D shapes intuitively.	KS1-S2-1 Identify 2-D shapes intuitively: triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles, rhombuses and circles.	3M2-Q28(b) (b) There is / are _____ trapezium(s) in the picture above. Assessment focus: Identify trapeziums.	3

Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the simple characteristics of triangles.	KS1-S2-2 Recognize the simple characteristics of triangles (e.g. 3 sides, 3 angles), including right-angled triangles, isosceles triangles and equilateral triangles.	3M2-Q29  On the pin-board, Tony uses rubber bands to make two * right-angled / isosceles / equilateral triangles. (*Circle the answer) Assessment focus: Recognize the simple characteristics of triangles, including right-angled triangles, isosceles triangles and equilateral triangles.	Circle 'right-angled'
Identify straight lines, curves, parallel lines and perpendicular lines.	KS1-S3-1 Identify straight lines, curves, parallel lines and perpendicular lines.	3M2-Q30 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, c

Learning Objective	Basic Competency	Item Number	Option / Answer
Compare sizes of angles.	KS1-S4-2 Compare sizes of angles.	3M2-Q31  Study the diagram above. Arrange the angles x, y and z from the largest to the smallest. Answer: _____ (Largest) , _____ , _____ (Smallest) Assessment focus: Compare sizes of angles.	x, z, y respectively
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M2-Q32(a) Mr Hui did a survey of the number of pupils in each Primary Three class using the computer room yesterday. **Number of Pupils in Each Primary Three Class Using the Computer Room Yesterday** Each ☺ stands for 1 pupil  (a) The number of pupils in Class _____ using the computer room yesterday was the least. There were only _____ pupils. Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	3A, 2 respectively

Learning Objective	Basic Competency	Item Number	Option / Answer
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M2-Q32(b) (b) The total number of Primary Three pupils using the computer room yesterday was _____ . Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	20
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M2-Q33(1) The pupils of P.3B voted for their favourite festivals with one person, one vote. The results are as follows: Festival / Chinese New Year / Easter / Mid-Autumn Festival / Christmas Number of pupils / 6 / 3 / 4 / 8 According to the results, complete the following pictogram and give it a title. (Title) Assessment focus: Give a title for the pictogram.	Title: Favourite Festivals of P.3B pupils
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M2-Q33(2) Each ○ stands for 1 pupil Chinese New Year Easter Mid-Autumn Festival Christmas Assessment focus: Construct pictograms using a one-to-one representation.	Chinese New Year: 6 pictures Easter: 3 pictures Mid-Autumn Festival: 4 pictures

Sub-paper 3 (3ME3)

Learning Objective	Basic Competency*	Item Number	Option / Answer
Recognize the place values: units, tens, hundreds, thousands and ten thousands.	KS1-N1-1 Recognize the place values: units, tens, hundreds, thousands and ten thousands.	3M3-Q01 Write a 5-digit number according to the instructions below. The digit '8' is in the hundreds place. The digit '5' is in the thousands place. The digit '3' is in the tens place. The digit '0' is in the units place. The digit '1' is in the ten thousands place. Assessment focus: Recognize the place values: units, tens, hundreds, thousands and ten thousands.	15 830
Recognize the place values: units, tens, hundreds, thousands and ten thousands.	KS1-N1-1 Recognize the place values: units, tens, hundreds, thousands and ten thousands.	3M3-Q02 In the number 93 715, the digit '3' stands for * 3 / 30 / 300 / 3 000 / 30 000 . (*Circle the answer) Assessment focus: Recognize the place value of thousands.	Circle '3 000'
Read, write and order numbers up to 5 digits.	KS1-N1-2 Read, write and order numbers up to 5 digits.	3M3-Q03 Write an ***even number*** which is larger than 59 873 but smaller than 60 124. Answer: _____ Assessment focus: Write numbers up to 5 digits.	Accept 59 874, 59 876, . . . , 60 122

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

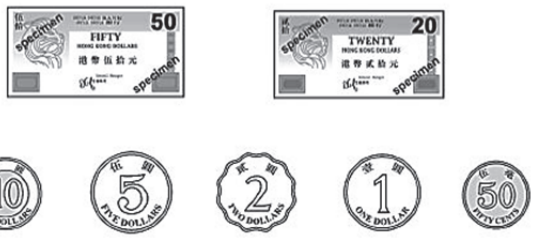
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform addition.	KS1-N2-1 Perform addition (with numbers up to 3 digits, not involving carrying in three steps but involving the commutative and associative properties of addition).	3M3-Q04 $204 + 365 + 178 =$ _____ Assessment focus: Perform addition.	747
Perform subtraction.	KS1-N2-2 Perform subtraction (with numbers up to 3 digits).	3M3-Q05 $752 - 328 - 135 =$ ○ A. 289 ○ B. 299 ○ C. 301 ○ D. 424 Assessment focus: Perform subtraction.	A. Correct Answer B. C. D.
Perform multiplication.	KS1-N2-3 Perform multiplication (with numbers up to 1 digit by 3 digits, involving the commutative property of multiplication).	3M3-Q06 $729 \times 4 =$ _____ Assessment focus: Perform multiplication.	2916

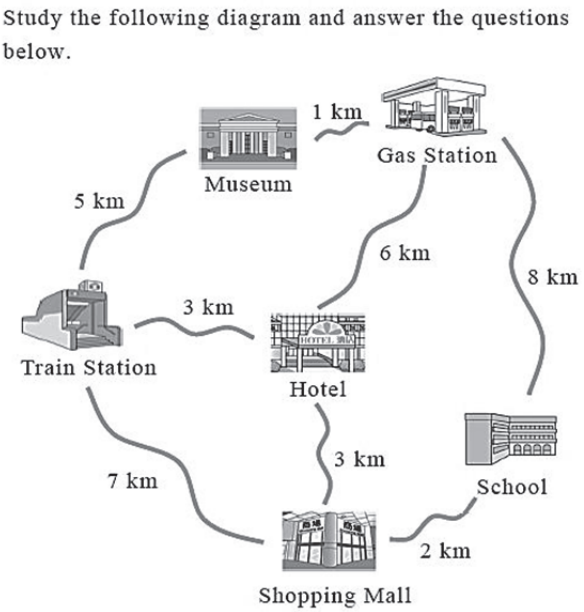
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform division.	KS1-N2-4 Perform division (with divisor 1 digit and dividend 3 digits).	3M3-Q07 $467 \div 5 =$ ○ A. 91…2 ○ B. 93 ○ C. 93…2 ○ D. 903…2 Assessment focus: Perform division.	A. B. C. Correct Answer D.
Perform mixed operations of: (a) Addition and subtraction ; (b) Multiplication and addition; (c) Multiplication and subtraction.	KS1-N2-5 Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	3M3-Q08 $485 - (308 \div 47) =$ _____ Assessment focus: Perform mixed operations of addition and subtraction.	130
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M3-Q09 Mandy has 862 dollars at first. She spends 379 dollars in the morning and 405 dollars in the afternoon. She has _____ dollars left. Assessment focus: Solve problems involving mixed operations.	78

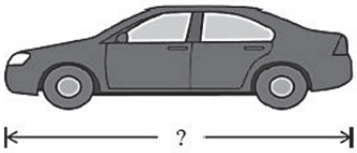
Learning Objective	Basic Competency	Item Number	Option / Answer
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M3-Q10 Each pupil gets 5 pieces of drawing paper. 75 pupils get _____ pieces of drawing paper altogether. Assessment focus: Solve problems involving multiplication.	375
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M3-Q11 Lily joins a drawing class. The total fee for 6 months is 654 dollars. On average, the fee for one month is ○ A. 19 dollars. ○ B. 109 dollars. ○ C. 190 dollars. ○ D. 3 924 dollars. Assessment focus: Solve problems involving division.	A. B. Correct Answer C. D.
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M3-Q12 Each cake costs 9 dollars. Jack pays with a 100-dollar note to buy 2 cakes. How much change does he get? (Show your working) Assessment focus: Solve problems involving mixed operations.	$100 - 9 \times 2$ $= 82$ He gets 82 dollars change.

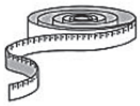
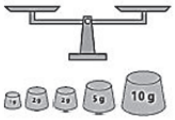
Learning Objective	Basic Competency	Item Number	Option / Answer
Solve problems involving addition, subtraction, multiplication and division in the calculation of money.	KS1-N2-7 Solve problems involving addition, subtraction, multiplication and division in the calculation of money (not involving mixed operations).	3M3-Q13   32 dollars 9 dollars and 50 cents Kitty buys a toy bear and a lollipop. She should pay _____ dollars and _____ cents altogether. Assessment focus: Solve problems involving addition in the calculation of money.	41, 50 respectively
Understand the concept of fractions as a part of one whole.	KS1-N3-1 Understand the concept of fractions as a part of one whole.	3M3-Q14 In the following figure, what fraction of the whole is shaded?  ○ A. $\frac{3}{8}$ ○ B. $\frac{3}{5}$ ○ C. $\frac{5}{8}$ ○ D. $\frac{5}{9}$ Assessment focus: Understand the concept of fractions as a part of one whole.	A. B. C. Correct Answer D.

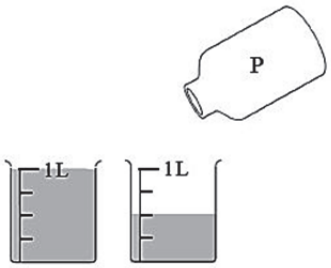
Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the relationship between fractions and the whole.	KS1-N3-2 Recognize the relationship between fractions and the whole.	3M3-Q15(a) (a) $\frac{3}{3}$ is * smaller than / equal to / larger than $\frac{2}{2}$. (*Circle the answer) Assessment focus: Recognize the relationship between fractions and the whole.	Circle 'equal to'
Compare fractions with same denominators or same numerators.	KS1-N3-3 Compare fractions with same denominators or same numerators.	3M3-Q15(b) (b) Fill in the box with a suitable number. $\frac{\square}{13}$ is larger than $\frac{6}{13}$. Assessment focus: Compare fractions with same denominators.	Accept any whole number larger than 6
Compare fractions with same denominators or same numerators.	KS1-N3-3 Compare fractions with same denominators or same numerators.	3M3-Q16 Father buys a bottle of milk. Kitty drinks $\frac{5}{11}$ of the whole, Charles drinks $\frac{2}{11}$ of the whole and Linda drinks $\frac{4}{11}$ of the whole. Who drinks the least milk? Answer: * Kitty / Charles / Linda drinks the least milk. (*Circle the answer) Assessment focus: Compare fractions with same denominators.	Circle 'Charles'

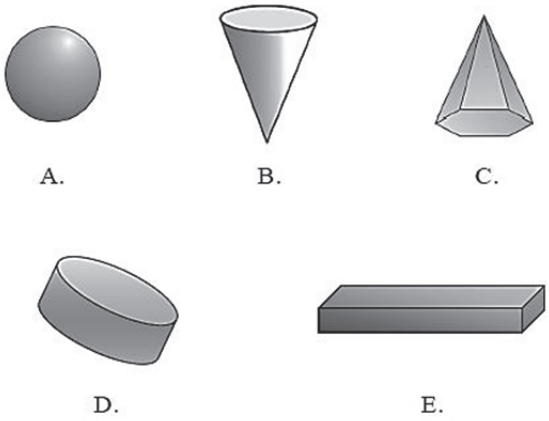
Learning Objective	Basic Competency	Item Number	Option / Answer
Read price tags.	KS1-M1-2 Read price tags.	3M3-Q17(a)  (a) A  costs _____ dollars and _____ cents. Assessment focus: Read price tags.	67, 50 respectively
Exchange and use money.	KS1-M1-3 Exchange and use money.	3M3-Q17(b) (b) Ryan buys a  . Circle the amount he should pay.  Assessment focus: Use Hong Kong money.	Circle an amount of '$67.50'

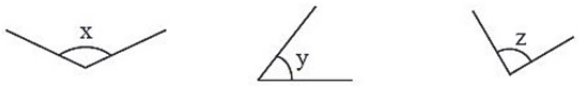
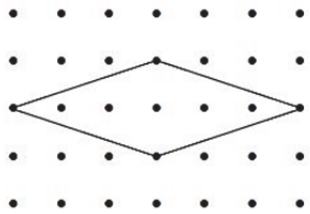
Learning Objective	Basic Competency	Item Number	Option / Answer
Express and compare the length of objects and the distance between objects using 'kilometre' (km).	KS1-M2-4 Express and compare the length of objects and the distance between objects using 'kilometre' (km).	3M3-Q18(a)  Assessment focus: Express and compare the distance between objects using 'kilometre' (km).	Gas Station
Express and compare the length of objects and the distance between objects using 'kilometre' (km).	KS1-M2-4 Express and compare the length of objects and the distance between objects using 'kilometre' (km).	3M3-Q18(b) (b) The shortest route from Train Station to School is _____ km. Assessment focus: Express and compare the distance between objects using 'kilometre' (km).	8

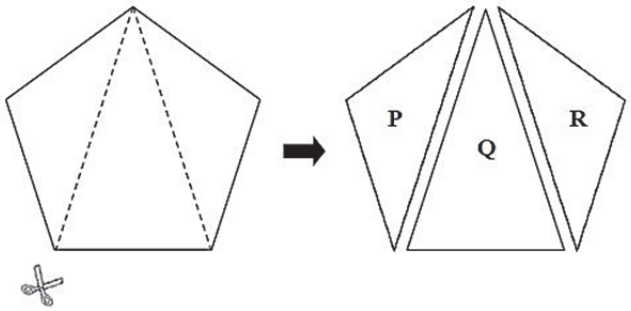
Learning Objective	Basic Competency	Item Number	Option / Answer
Measure and compare the length of objects and the distance between objects using ‘millimetre’ (mm), ‘centimetre’ (cm) or ‘metre’ (m).	KS1-M2-3 Measure and compare the length of objects and the distance between objects using ‘millimetre’ (mm), ‘centimetre’ (cm) or ‘metre’ (m).	3M3-Q19 Use a ruler to measure the length of the toy car below.  The length of the toy car is _____ cm. Assessment focus: Measure the length of objects using ‘centimetre’ (cm).	8
Measure the capacity of containers with appropriate tools.	KS1-M5-4 Measure with appropriate tools.	3M3-Q20  Which of the following is most suitable for measuring the capacity of a vase?  O A.  O B.  O C.  O D. Assessment focus: Measure the capacity of containers with appropriate tools.	A. Correct Answer B. C. D.

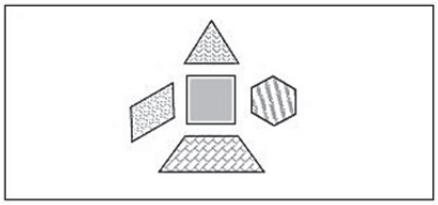
Learning Objective	Basic Competency	Item Number	Option / Answer
Measure the weight of an object with appropriate measuring tools.	KS1-M4-4 Measure with appropriate tools.	3M3-Q21  Which of the following is most suitable for measuring the weight of a watermelon?  O A.  O B.  O C.  O D. Assessment focus: Measure the weight of an object with appropriate measuring tools.	A. B. C. D. Correct Answer
Record the weight of objects with appropriate units.	KS1-M4-5 Record the weight of objects with appropriate units.	3M3-Q22(a) Fill in the following blanks with suitable units. (a) The weight of a bag of rice is about 2 _____ . Assessment focus: Record the weight of objects with appropriate units.	kilograms / kg
Record the length of objects and the distance between objects with an appropriate single unit	KS1-M2-7 Record the length of objects and the distance between objects with an appropriate single unit	3M3-Q22(b) (b) The length of a basketball court is about 28 _____ . Assessment focus: Record the length of objects with an appropriate single unit.	metres / m

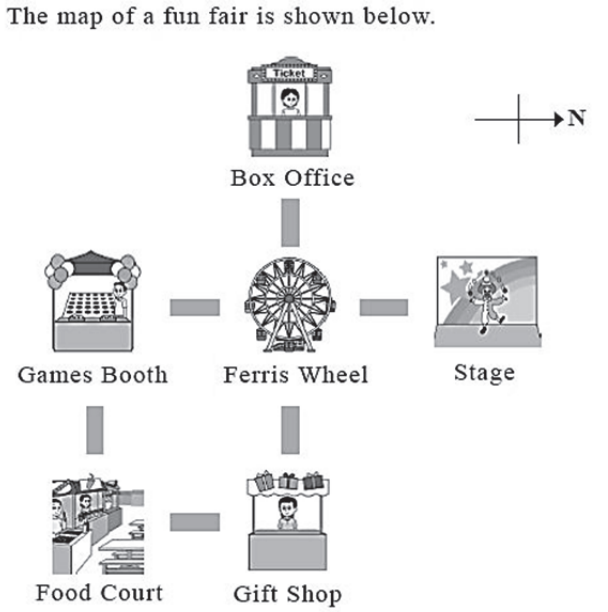
Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize and apply the '24-hour time'.	KS1-M3-4 Recognize and apply the '24-hour time'.	3M3-Q23(a) The opening hours of a bookstore on one day is shown below. **Opening Hours** 13:30 – 20:30 (a) The bookstore opens at _____ : _____ * a.m. / p.m. (*Circle the answer) Assessment focus: Recognize and apply the '24-hour time'.	1, 30, circle 'p.m.' respectively
Recognize and apply the '24-hour time'.	KS1-M3-4 Recognize and apply the '24-hour time'.	3M3-Q23(b) (b) The bookstore is open _____ hour(s) in a whole day. Assessment focus: Recognize and apply the '24-hour time'.	7
Measure and compare the capacity of containers using 'litre' (L) or 'millilitre' (mL).	KS1-M5-3 Measure and compare the capacity of containers using 'litre' (L) or 'millilitre' (mL).	3M3-Q24 Fill up container P with water. Then pour all the water into two empty measuring cups.  The capacity of container P is _____ mL. Assessment focus: Measure the capacity of containers using 'litre' (L) or 'millilitre' (mL).	1 500

Learning Objective	Basic Competency	Item Number	Option / Answer
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M3-Q25(a) Follow the instruction. Write down all the letters for the answers.  A. B. C. D. E. List: (a) Cylinder(s): _____ Assessment focus: Group 3-D shapes.	D
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M3-Q25(b) (b) Sphere(s): _____ Assessment focus: Group 3-D shapes.	A

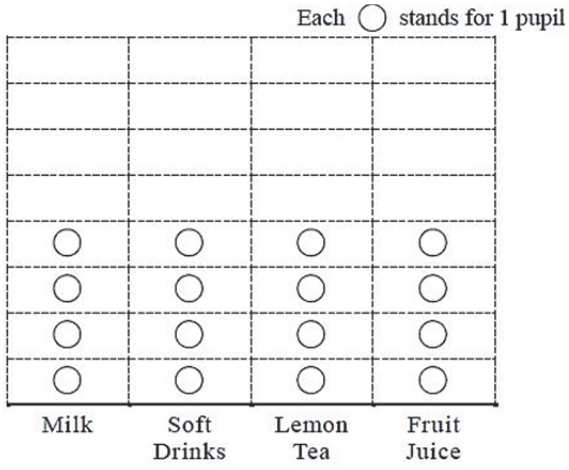
Learning Objective	Basic Competency	Item Number	Option / Answer
Compare sizes of angles.	KS1-S4-2 Compare sizes of angles.	3M3-Q26  Study the diagram above. Arrange the angles x, y and z from the largest to the smallest. Answer: _____ (Largest) , _____ , _____ (Smallest) Assessment focus: Compare sizes of angles.	x, z, y respectively
Identify 2-D shapes intuitively.	KS1-S2-1 Identify 2-D shapes intuitively: triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles, rhombuses and circles.	3M3-Q27 David uses a rubber band to make a 2-D shape on the pin-board.  This is a ○ A. square. ○ B. rhombus. ○ C. rectangle. ○ D. trapezium. Assessment focus: Identify rhombuses.	A. B. Correct Answer C. D.

Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the simple characteristics of triangles.	KS1-S2-2 Recognize the simple characteristics of triangles (e.g. 3 sides, 3 angles), including right-angled triangles, isosceles triangles and equilateral triangles.	3M3-Q28 The sides of the pentagon below are equal in length.  Peter cuts the pentagon along the dotted lines. He gets three triangles. Figure **P** is * a right-angled / an isosceles / an equilateral triangle. (*Circle the answer) Assessment focus: Recognize the simple characteristics of triangles, including right-angled triangles, isosceles triangles and equilateral triangles.	Circle ‘an isosceles’

Learning Objective	Basic Competency	Item Number	Option / Answer
Describe the relative positions of two 2-D shapes using 'left', 'right', 'above' and 'under'.	KS1-S2-4 Describe the relative positions of two 2-D shapes using 'left', 'right', 'above' and 'under'.	3M3-Q29 Miss Au puts five 2-D shapes on *a wall*.  The shape above  is *  /  /  . (*Circle the answer) Assessment focus: Describe the relative positions of two 2-D shapes using 'left', 'right', 'above' and 'under'.	Circle '  '
Identify straight lines, curves, parallel lines and perpendicular lines.	KS1-S3-1 Identify straight lines, curves, parallel lines and perpendicular lines.	3M3-Q30 (a) Study the letters below. Write down all the answers. T Y P C List: (a) The letter(s) formed by curve(s) only: _____ Assessment focus: Identify curves.	C
Identify straight lines, curves, parallel lines and perpendicular lines.	KS1-S3-1 Identify straight lines, curves, parallel lines and perpendicular lines.	3M3-Q30 (b) (b) The letter(s) formed by straight line(s) only: _____ Assessment focus: Identify straight lines.	T, Y

Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the four directions: east, south, west and north, with the use of compass.	KS1-S5-1 Recognize the four directions: east, south, west and north, with the use of compass.	3M3-Q31(a)  (a) Cindy goes north from Ferris Wheel to * Box Office / Stage / Games Booth . (*Circle the answer) Assessment focus: Recognize the four directions: east, south, west and north with the concept of use of compass.	Circle 'Stage'
Recognize the four directions: east, south, west and north, with the use of compass.	KS1-S5-1 Recognize the four directions: east, south, west and north, with the use of compass.	3M3-Q31(b) (b) Food Court is to the _____ of Games Booth. (direction) Assessment focus: Recognize the four directions: east, south, west and north with the concept of use of compass.	east

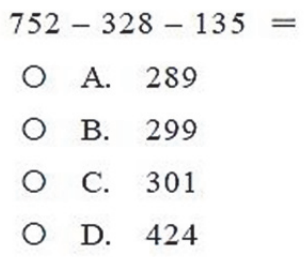
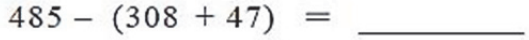
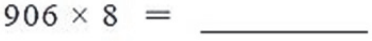
Learning Objective	Basic Competency	Item Number	Option / Answer
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M3-Q32 (a) Mr Ng did a survey of the favourite snacks of P.3C pupils. **Favourite Snacks of P.3C Pupils** Each ☺ stands for 1 pupil  (a) The number of pupils who favoured sweets was _____ . Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	5
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M3-Q32 (b) (b) The number of pupils who favoured ice-cream was _____ * more / less than that of pupils who favoured biscuits. (*Circle the answer) Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	4, circle 'more' respectively

Learning Objective	Basic Competency	Item Number	Option / Answer
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(a) The pupils of P.3A voted for their favourite drinks with one person, one vote. (a) According to the record, complete the table below. Type of drinks / Milk / Soft Drinks / Lemon Tea / Fruit Juice Record / 𝍸 / 𝍸 | / 𝍸 / 𝍸 || Number of pupils / / / / Assessment focus: Complete the information in a table according to the record of a survey.	4, 6, 5, 7 respectively
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(b)(1) (b) According to the results, complete the following pictogram and give it a title. (Title) Assessment focus: Give a title for the pictogram.	Title: Favourite Drinks of P.3A Pupils
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(b)(2)  Assessment focus: Construct pictograms using a one-to-one representation.	Milk: totally 4 pictures Soft Drinks: totally 6 pictures Lemon Tea: totally 5 pictures Fruit Juice: totally 7 pictures

Sub-paper 4 (3ME4)

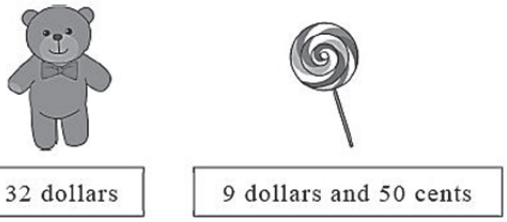
Learning Objective	Basic Competency*	Item Number	Option / Answer
Recognize the place values: units, tens, hundreds, thousands and ten thousands.	KS1-N1-1 Recognize the place values: units, tens, hundreds, thousands and ten thousands.	3M4-Q01 Write a 5-digit number according to the instructions below. The digit '8' is in the hundreds place. The digit '5' is in the thousands place. The digit '3' is in the tens place. The digit '0' is in the units place. The digit '1' is in the ten thousands place.  Assessment focus: Recognize the place values: units, tens, hundreds, thousands and ten thousands.	15 830
Read, write and order numbers up to 5 digits.	KS1-N1-2 Read, write and order numbers up to 5 digits.	3M4-Q02 Write an ***even number*** which is larger than 59 873 but smaller than 60 124. Answer: _____ Assessment focus: Write numbers up to 5 digits.	Accept 59 874, 59 876, . . . , 60 122
Perform addition.	KS1-N2-1 Perform addition (with numbers up to 3 digits, not involving carrying in three steps but involving the commutative and associative properties of addition).	3M4-Q03 67 + 324 + 59 = ○ A. 330 ○ B. 391 ○ C. 440 ○ D. 450 Assessment focus: Perform addition.	A. B. C. D. Correct Answer

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

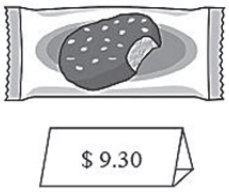
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform subtraction.	KS1-N2-2 Perform subtraction (with numbers up to 3 digits).	3M4-Q04  Assessment focus: Perform subtraction.	A. Correct Answer B. C. D.
Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	KS1-N2-5 Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	3M4-Q05  Assessment focus: Perform mixed operations of addition and subtraction.	130
Perform multiplication.	KS1-N2-3 Perform multiplication (with numbers up to 1 digit by 3 digits, involving the commutative property of multiplication).	3M4-Q06  Assessment focus: Perform multiplication.	7 248

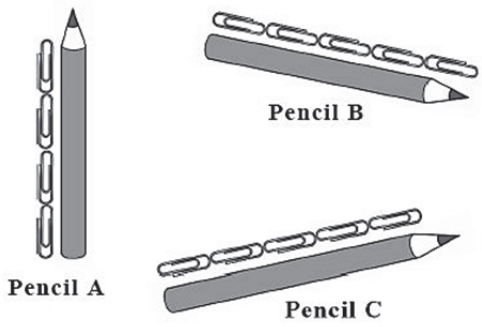
Learning Objective	Basic Competency	Item Number	Option / Answer
Perform division.	KS1-N2-4 Perform division (with divisor 1 digit and dividend 3 digits).	3M4-Q07 $928 \div 9 =$ ○ A. 13 ○ B. 13…1 ○ C. 103 ○ D. 103…1 Assessment focus: Perform division.	A. B. C. D. Correct Answer
Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	KS1-N2-5 Perform mixed operations of: (a) Addition and subtraction; (b) Multiplication and addition; (c) Multiplication and subtraction.	3M4-Q08 $4 \times 8 - 7 =$ _____ Assessment focus: Perform mixed operations of multiplication and subtraction.	25
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M4-Q09 Mandy has 862 dollars at first. She spends 379 dollars in the morning and 405 dollars in the afternoon. She has _____ dollars left. Assessment focus: Solve problems involving mixed operations.	78

Learning Objective	Basic Competency	Item Number	Option / Answer
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M4-Q10 There are 250 people on a train originally. When the train arrives at a station, 135 people get off and 64 people get on. There are _____ people on the train now. Assessment focus: Solve problems involving mixed operations.	179
Solve problems involving mixed operations.	KS1-N2-6 Solve problems involving mixed operations.	3M4-Q11 Each cake costs 9 dollars. Jack pays with a 100-dollar note to buy 2 cakes. How much change does he get? (Show your working) Assessment focus: Solve problems involving mixed operations.	$100 - 9 \times 2$ $= 82$ He gets 82 dollars change.

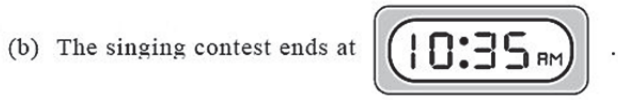
Learning Objective	Basic Competency	Item Number	Option / Answer
Solve problems involving addition, subtraction, multiplication and division in the calculation of money.	KS1-N2-7 Solve problems involving addition, subtraction, multiplication and division in the calculation of money (not involving mixed operations).	3M4-Q12  Kitty buys a toy bear and a lollipop. She should pay _____ dollars and _____ cents altogether. Assessment focus: Solve problems involving addition in the calculation of money.	41, 50 respectively
Understand the concept of fractions as a part of one whole.	KS1-N3-1 Understand the concept of fractions as a part of one whole.	3M4-Q13(a) Joe has 6 sweets. $\frac{2}{3}$ of the whole are milk sweets. The rest are fruit sweets.  (a) The number of milk sweets is _____ . Assessment focus: Understand the concept of fractions as a part of one whole.	4
Understand the concept of fractions as a part of one whole.	KS1-N3-1 Understand the concept of fractions as a part of one whole.	3M4-Q13(b) (b) $\frac{\square}{\square}$ of the whole are fruit sweets. Assessment focus: Understand the concept of fractions as a part of one whole.	Accept $\frac{1}{3}$, $\frac{2}{6}$

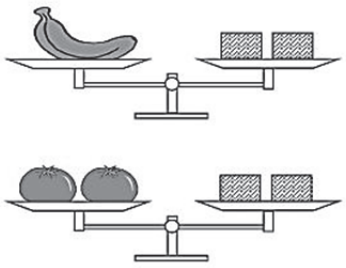
Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the relationship between fractions and the whole.	KS1-N3-2 Recognize the relationship between fractions and the whole.	3M4-Q14(a) Fill in the boxes with suitable numbers. (a) $\frac{8}{\square}$ is equal to 1. Assessment focus: Recognize the relationship between fractions and the whole.	8
Compare fractions with same denominators or same numerators.	KS1-N3-3 Compare fractions with same denominators or same numerators.	3M4-Q14(b) (b) $\frac{1}{\square}$ is smaller than $\frac{1}{4}$. Assessment focus: Compare fractions with same numerators.	Accept any whole number larger than 4
Compare fractions with same denominators or same numerators.	KS1-N3-3 Compare fractions with same denominators or same numerators.	3M4-Q15 Arrange the following fractions from the largest to the smallest. $\frac{3}{7}$, $\frac{3}{5}$, $\frac{4}{5}$ Answer : $\square$, $\square$, $\square$ (Largest) (Smallest) Assessment focus: Compare fractions with same denominators or same numerators.	$\frac{4}{5}$, $\frac{3}{5}$, $\frac{3}{7}$ respectively

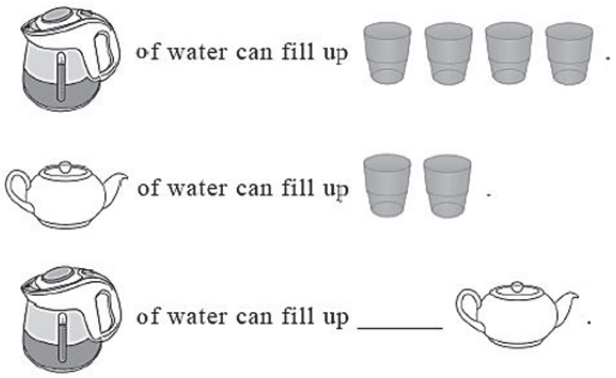
Learning Objective	Basic Competency	Item Number	Option / Answer
Read price tags.	KS1-M1-2 Read price tags.	3M4-Q16(a)  (a) An ice-cream bar costs _____ dollars and _____ cents. Assessment focus: Read price tags.	9, 30 respectively
Exchange and use money.	KS1-M1-3 Exchange and use money.	3M4-Q16(b) (b) Jimmy pays  to buy an ice-cream bar. Circle the change returned to Jimmy by the shopkeeper.  Assessment focus: Use Hong Kong money.	Circle an amount of '$0.70'
Exchange and use money.	KS1-M1-3 Exchange and use money.	3M4-Q17 Miss Ho pays the following amount to buy gift coupons.  Each gift coupon costs 50 dollars. Miss Ho buys _____ gift coupons altogether. Assessment focus: Exchange and use money.	4

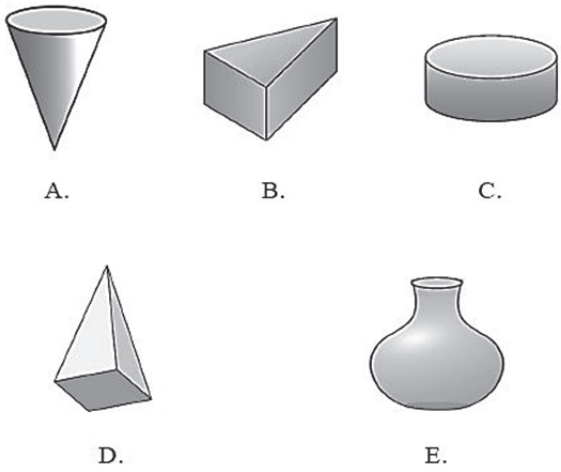
Learning Objective	Basic Competency	Item Number	Option / Answer
Compare the length of objects and the distance between objects using improvised units.	KS1-M2-2 Compare the length of objects and the distance between objects using improvised units.	3M4-Q18  Compare the lengths of the three pencils above. Pencil * A / B / C is the longest. (*Circle the answer) Assessment focus: Compare the length of objects using improvised units.	Circle 'C'
Record the length of objects and the distance between objects with an appropriate single unit.	KS1-M2-7 Record the length of objects and the distance between objects with an appropriate single unit.	3M4-Q19 Fill in the following blank with a suitable unit.  The thickness of a pack of tissue paper is about 20 _____ . Assessment focus: Record the length of objects with an appropriate single unit.	millimetres / mm

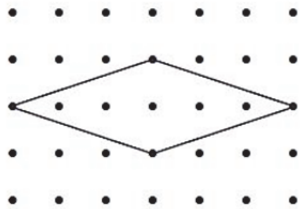
Learning Objective	Basic Competency	Item Number	Option / Answer
Tell the dates and days of a week.	KS1-M3-1 Tell the dates and days of a week.	3M4-Q20(a) Answer the following questions according to the calendar for November below. **November** Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday 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 (a) The school picnic is held on the fourth Friday of November. That day is the _____ of _____ . (month) Assessment focus: Tell the dates.	22 nd, November respectively
Tell the dates and days of a week.	KS1-M3-1 Tell the dates and days of a week.	3M4-Q20(b) (b) The penmanship competition is held on the 18th of November. That day is _____ . (day of the week) Assessment focus: Tell the days of a week.	Monday

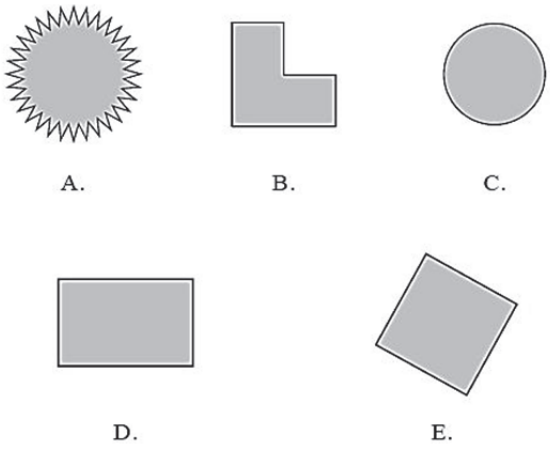
Learning Objective	Basic Competency	Item Number	Option / Answer
Tell time from a clock face and a digital clock.	KS1-M3-2 Tell time from a clock face and a digital clock.	3M4-Q21(a)  (a) The singing contest starts at _____ minute(s) past _____ in the * morning / afternoon. (*Circle the answer) Assessment focus: Tell time from a digital clock.	15, 9, circle 'morning' respectively
Record the duration of time for different activities using 'hours and minutes', 'minutes and seconds' or 'seconds'.	KS1-M3-3 Record the duration of time for different activities using 'hours and minutes', 'minutes and seconds' or 'seconds' (not involving changing units).	3M4-Q21(b)  It lasts for _____ hour(s) and _____ minute(s). Assessment focus: Record the duration of time for different activities using 'hours and minutes'.	1, 20 respectively

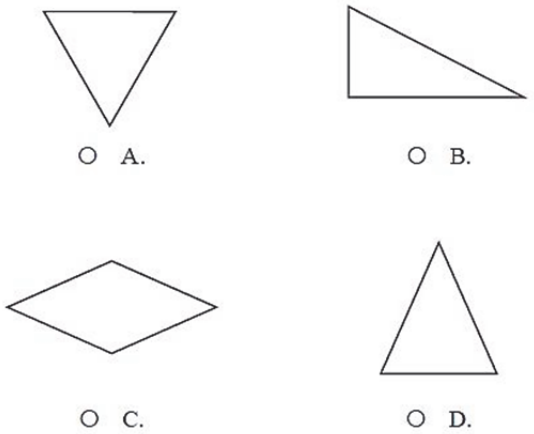
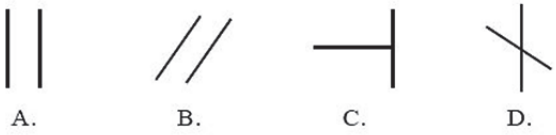
Learning Objective	Basic Competency	Item Number	Option / Answer
Measure and compare the weight of objects using improvised units.	KS1-M4-2 Measure and compare the weight of objects using improvised units.	3M4-Q22  Study the diagram above. Which of the following is correct? ○ A.  is heavier than  . ○ B.  is heavier than  . ○ C.  and  weigh the same. ○ D. The weights of  and  cannot be compared. Assessment focus: Measure and compare the weight of objects using improvised units.	A. B. Correct Answer C. D.

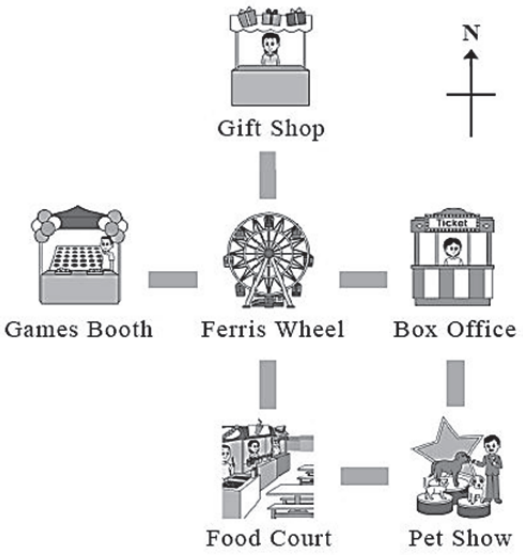
Learning Objective	Basic Competency	Item Number	Option / Answer
Measure and compare the capacity of containers using improvised units.	KS1-M5-2 Measure and compare the capacity of containers using improvised units.	3M4-Q23  Assessment focus: Measure and compare the capacity of containers using improvised units.	2
Measure and compare the capacity of containers using 'litre' (L) or 'millilitre' (mL).	KS1-M5-3 Measure and compare the capacity of containers using 'litre' (L) or 'millilitre' (mL).	3M4-Q24 Fill up container Q with water. 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).	350

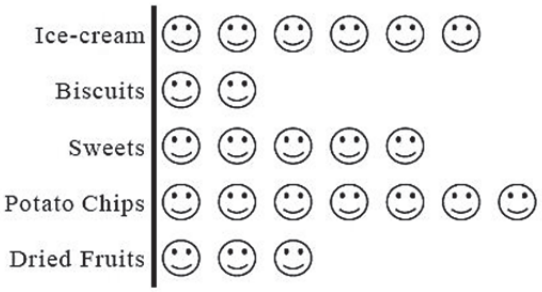
Learning Objective	Basic Competency	Item Number	Option / Answer
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M4-Q25(a) Follow the instruction. Write down all the letters for the answers.  List: (a) Prism(s): _____ Assessment focus: Group 3-D shapes.	B
Group 3-D shapes.	KS1-S1-2 Group 3-D shapes.	3M4-Q25(b) (b) Cone(s): _____ Assessment focus: Group 3-D shapes.	A

Learning Objective	Basic Competency	Item Number	Option / Answer
Identify prisms, pyramids and spheres.	KS1-S1-1 Identify prisms, pyramids and spheres.	3M4-Q26 The 3-D shape on the right is a ○ A. prism. ○ B. pyramid. ○ C. cylinder. ○ D. cone.  Assessment focus: Identify prisms / cylinders.	A. B. C. Correct Answer D.
Identify 2-D shapes intuitively.	KS1-S2-1 Identify 2-D shapes intuitively: triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles, rhombuses and circles.	3M4-Q27 David uses a rubber band to make a 2-D shape on the pin-board.  This is a ○ A. square. ○ B. rhombus. ○ C. rectangle. ○ D. trapezium. Assessment focus: Identify rhombuses.	A. B. Correct Answer C. D.

Learning Objective	Basic Competency	Item Number	Option / Answer
Group 2-D shapes.	KS1-S2-3 Group 2-D shapes.	3M4-Q28(a) Study the following 2-D shapes. Write down all the letters for the answers.  List: (a) Circle(s): _____ Assessment focus: Group 2-D shapes.	C
Group 2-D shapes.	KS1-S2-3 Group 2-D shapes.	3M4-Q28(b) (b) Square(s): _____ Assessment focus: Group 2-D shapes.	E

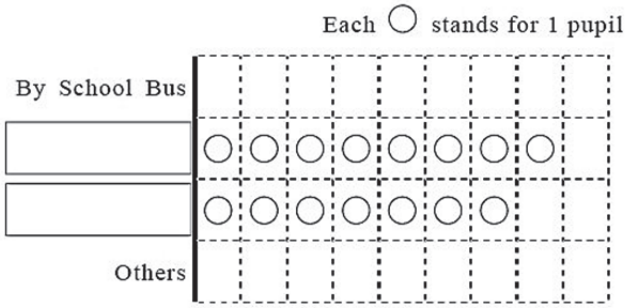
Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the simple characteristics of triangles.	KS1-S2-2 Recognize the simple characteristics of triangles (e.g. 3 sides, 3 angles), including right-angled triangles, isosceles triangles and equilateral triangles.	3M4-Q29 Which of the following is an equilateral triangle?  O A. O B. O C. O D. Assessment focus: Recognize the simple characteristics of triangles, including right-angled triangles, isosceles triangles and equilateral triangles.	A. Correct Answer B. C. D.
Identify straight lines, curves, parallel lines and perpendicular lines.	KS1-S3-1 Identify straight lines, curves, parallel lines and perpendicular lines.	3M4-Q30 Study the following figures. Write down the letter(s) for the answer.  A. B. C. D. List the figure(s) formed by perpendicular lines. Answer: _____ Assessment focus: Identify perpendicular lines.	C

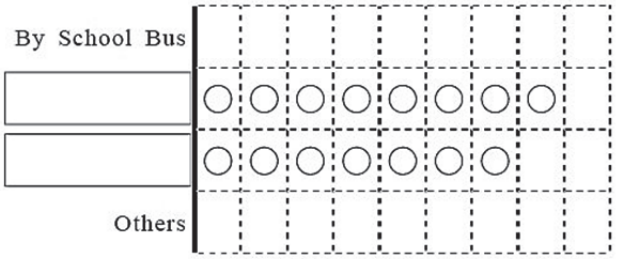
Learning Objective	Basic Competency	Item Number	Option / Answer
Recognize the four directions: east, south, west and north, with the use of compass.	KS1-S5-1 Recognize the four directions: east, south, west and north, with the use of compass.	3M4-Q31(a) The map of a fun fair is shown below.  (a) Starting from Box Office, Tim goes _____ to see the Pet Show. (direction) Assessment focus: Recognize the four directions: east, south, west and north with the concept of use of compass.	south
Recognize the four directions: east, south, west and north, with the use of compass.	KS1-S5-1 Recognize the four directions: east, south, west and north, with the use of compass.	3M4-Q31(b) (b) * Box Office / Food Court / Games Booth is to the west of Ferris Wheel. (*Circle the answer) Assessment focus: Recognize the four directions: east, south, west and north with the concept of use of compass.	Circle 'Games Booth'

Learning Objective	Basic Competency	Item Number	Option / Answer
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M4-Q32 (a) Mr Ng did a survey of the favourite snacks of P.3C pupils. **Favourite Snacks of P.3C Pupils** Each ☺ stands for 1 pupil  (a) The number of pupils who favoured sweets was _____ . Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	5
Read and interpret simple pictograms with a one-to-one representation.	KS1-D1-1 Read and interpret simple pictograms with a one-to-one representation.	3M4-Q32 (b) (b) The number of pupils who favoured ice-cream was _____ * more / less than that of pupils who favoured biscuits. (*Circle the answer) Assessment focus: Read and interpret simple pictograms with a one-to-one representation.	4, circle 'more' respectively

Learning Objective	Basic Competency	Item Number	Option / Answer
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M4-Q33(a) Miss Yip did a survey of the ways of going to school of P.3D pupils. (a) According to the record, complete the table below. Assessment focus: Complete the information in a table according to the record of a survey.	4, 8, 7, 3 respectively
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M4-Q33(b)(1) (b) According to the results, complete the following pictogram. Assessment focus: Fill in the appropriate types in the pictogram.	From top to bottom: By Bus, On Foot

Way of going to school	By School Bus	By Bus	On Foot	Others
Record	𝍸	𝍸 𝍸	𝍸 𝍸	𝍸
Number of pupils				



Learning Objective	Basic Competency	Item Number	Option / Answer
Construct pictograms using a one-to-one representation.	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M4-Q33(b)(2) (b) According to the results, complete the following pictogram. **Ways of Going to School of P.3D Pupils** Each ○ stands for 1 pupil  Assessment focus: Construct pictograms using a one-to-one representation.	By School Bus: 4 pictures Others: 3 pictures