Territory-wide System Assessment 2026 (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 2026 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 Write a 5-digit number according to the instructions below. The digit '7' is in the hundreds place. The digit '2' is in the units place. The digit '0' is in the thousands place. The digit '3' is in the ten thousands place. The digit '8' is in the tens place. Assessment focus: Demonstrate recognition of units place to ten thousands place.	30 782
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 Three ***even numbers*** are arranged from the smallest to the largest as shown below. 51 374 (Smallest) , ? , 63 892 (Largest) The number in the box may be ○ A. 49 286. ○ B. 54 198. ○ C. 62 043. ○ D. 72 580. Assessment focus: Order numbers up to 5 digits.	A. B. Correct Answer C. D.

* Please refer to the BCA website (https://www.bca.hkeaa.edu.hk/web/TSA/en/BC/P_BC_M.pdf) for the Basic Competencies Descriptors documents

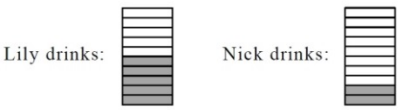
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M1-Q03 $138 + 342 + 276 =$ _____ Assessment focus: Perform addition.	756
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 $900 - 654 =$ _____ Assessment focus: Perform subtraction.	246

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-Q05 $8 \times 270 = \_\_\_\_\_$ Assessment focus: Perform multiplication.	2 160
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-Q06 $127 - (35 + 48) = \_\_\_\_\_$ Assessment focus: Perform mixed operations of addition and subtraction, involving using brackets.	44

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 $724 \div 6 =$ ○ A. 12…4 ○ B. 104 ○ C. 120 ○ D. 120…4 Assessment focus: Perform division.	A. B. C. D. Correct 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-Q08 Carman has 120 biscuits at first. She eats 13 biscuits and gives 27 biscuits to her friends. Finally she has _____ biscuits left. Assessment focus: Solve problems involving subtraction.	80
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 There are 7 boxes of oranges in a fruit shop. Each box contains 105 oranges. The fruit shop has _____ oranges altogether. Assessment focus: Solve problems involving multiplication.	735

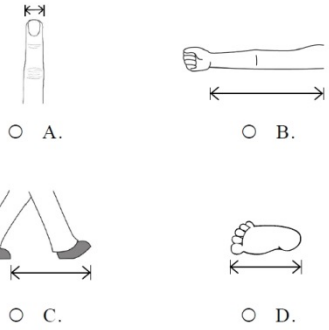
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M1-Q10 Each apple costs 6 dollars. Miss Chan pays 100 dollars to buy 8 apples. How much change does she get? (Show your working) Assessment focus: Solve problems involving multiplication and subtraction.	$100 - 6 \times 8$ $= 52$ She gets 52 dollars change.
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 The shopkeeper needs 8 mooncakes to fill up a box. He has 97 mooncakes. At most, he can fill up ○ A. 12 boxes. ○ B. 13 boxes. ○ C. 89 boxes. ○ D. 776 boxes. Assessment focus: Solve problems involving division.	A. Correct Answer B. C. D.

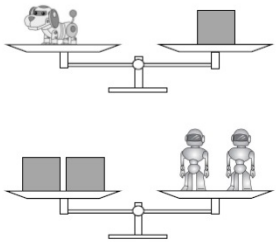
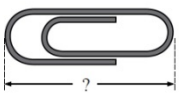
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M1-Q12(a) (a) $\frac{10}{10}$ is equal to * 1 / 10 / 100 . (*Circle the answer) Assessment focus: Demonstrate recognition of the relationship between fractions and the whole.	Circle '1'
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M1-Q12(b) (b) Fill in the box with a suitable number. $\frac{5}{12}$ is smaller than $\frac{\square}{12}$. Assessment focus: Compare the magnitude of fractions with same denominators.	Accept any whole number larger than 5
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M1-Q13 Choose equivalent fraction(s) of $\frac{1}{2}$  below. Write down all the letter(s) for the answer. $\frac{4}{8}$  A. $\frac{2}{4}$  B. $\frac{4}{6}$  C. Answer: _____ Assessment focus: Demonstrate recognition of the diagrams representing equivalent fractions.	A, B

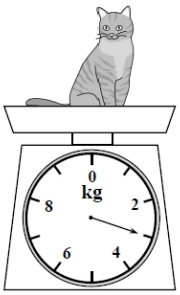
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-4 Perform addition and subtraction of three fractions with the same denominators at most (not involving performing mixed operations; results of addition must not be greater than 1; minuends in subtraction must not be greater than 1).	3M1-Q14  $\frac{1}{9} + \frac{5}{9} + \frac{2}{9} = \frac{\square}{\square}$ Assessment focus: Perform addition of fractions with the same denominators.	$\frac{8}{9}$
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M1-Q15 Lily drinks $\frac{5}{10}$ of a carton of juice. Nick drinks $\frac{2}{10}$ of a carton of juice. How much more of a carton of juice does Lily drink than Nick?  Lily drinks: Nick drinks: (Show your working) Assessment focus: Solve problems involving subtraction of fractions with the same denominators that are illustrated by diagrams.	$\frac{5}{10} - \frac{2}{10}$ $= \frac{3}{10}$ Lily drinks $\frac{3}{10}$ more of a carton of juice than Nick.

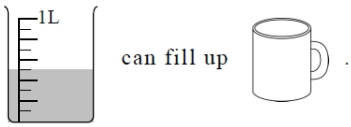
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M1-Q16(a)  (a) A cupcake costs _____ dollars and _____ cents. Assessment focus: Read price tags.	8, 40 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M1-Q16(b) (b) Carl pays  to buy a cupcake. Circle the change returned to Carl by the shopkeeper.  Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "$1.60"

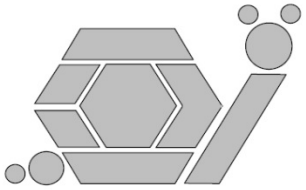
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	3M1-Q17(a)  Lucas and Winnie go to the cinema to watch a movie. The clock above shows their meeting time. (a) They meet at _____ minute(s) past _____ in the afternoon. Assessment focus: Tell time from an analog clock.	15, 7 respectively
Time	KS1-M3-3 Record the duration of time for different activities in “hours”, “minutes” or “seconds”(not involving changing units).	3M1-Q17(b) (b) Their meeting time is 10 minutes earlier than the show time of the movie. The movie starts at _____ minute(s) past _____ in the afternoon. Assessment focus: Find the starting time of an activity.	25, 7 respectively

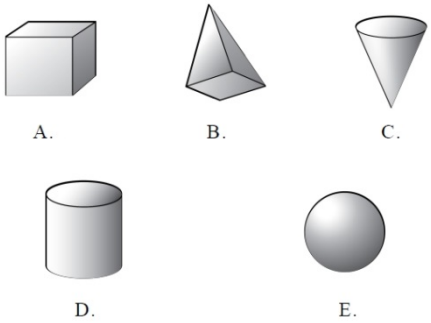
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-5 Estimate the lengths of objects and the distances between objects with finger width, arm length, foot span, finger span, stride length, etc., as "ever-ready rulers".	3M1-Q18  Which of the following is most suitable for measuring the length of a battery?  ○ A. ○ B. ○ C. ○ D. Assessment focus: Choose appropriate "ever-ready rulers" for measuring the lengths of objects.	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.	3M1-Q19(a) Fill in the following blanks with suitable units. (a) The thickness of an exercise book is about 4 _____ . Assessment focus: Record the thicknesses of objects in an appropriate unit.	millimetres / mm
Weight	KS1-M4-5 Record the weights of objects in an appropriate single unit.	3M1-Q19(b) (b) The weight of a student chair is about 3 _____ . Assessment focus: Record the weights of objects in an appropriate unit.	kilograms / kg

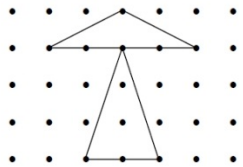
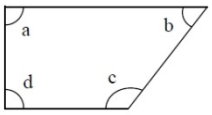
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-2 Compare the weights of objects in improvised units.	3M1-Q20  Study the diagram above. Which of the following is correct? ○ A.  is heavier than  . ○ B.  is lighter than  . ○ C.  and  weigh the same. ○ D. The weights of  and  cannot be compared. Assessment focus: Compare the weights of objects in improvised units.	A. B. C. Correct Answer D.
Length and Distance	KS1-M2-3 Measure and compare the lengths of objects and measure and compare the distances between objects in “millimetre” (mm), “centimetre” (cm) or “metre” (m).	3M1-Q21 Use a ruler to measure the length of the paper clip below.  The length of the paper clip is _____ cm. Assessment focus: Measure the lengths of objects in “centimeter” (cm).	5

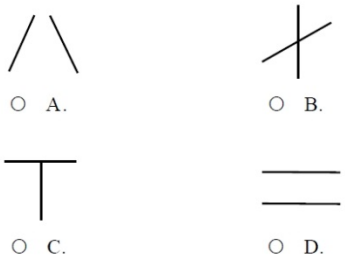
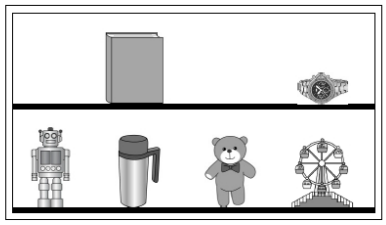
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M1-Q22  The weight of  is _____ kg. Assessment focus: Measure the weights of objects in "kilogram" (kg).	3
Capacity	KS1-M5-4 Measure the capacities of containers with appropriate tools.	3M1-Q23  Which of the following is most suitable for measuring the capacity of a milk bottle?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the capacities of containers with appropriate tools.	A. B. Correct Answer C. D.

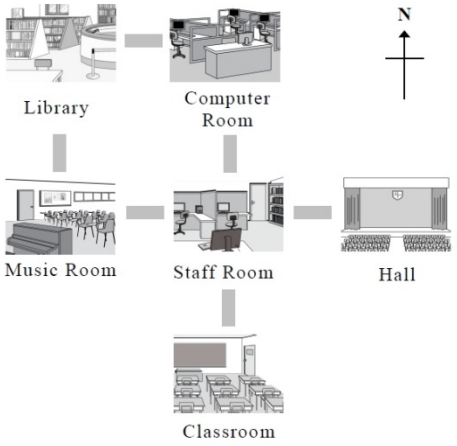
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Capacity	KS1-M5-3 Measure and compare the capacities of containers in "litre" (L) or "millilitre" (mL).	3M1-Q24   Assessment focus: Measure the capacities of containers in "millilitre" (mL).	500

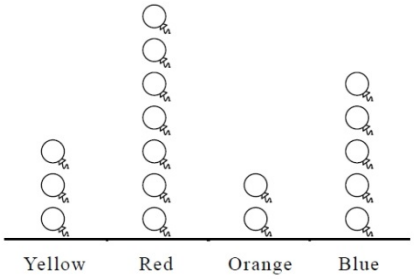
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M1-Q25(a) David uses different 2-D shapes to form a picture.  (a) There is / are _____ circle(s) in the picture above. Assessment focus: Identify circles intuitively.	5
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-Q25(b) (b) There is / are _____ parallelogram(s) in the picture above. Assessment focus: Identify parallelograms intuitively.	3

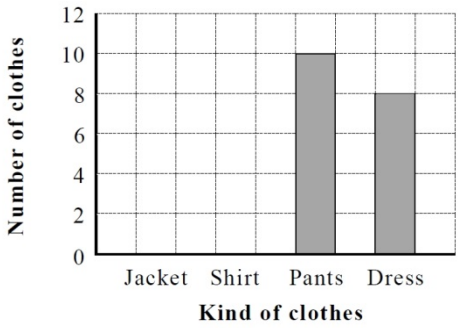
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M1-Q26(a) Study the 3-D shapes below. Write down all the letters for the answers.  A. B. C. D. E. List: (a) Sphere(s): _____ Assessment focus: Identify spheres intuitively.	E
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M1-Q26(b) (b) Pyramid(s): _____ Assessment focus: Identify pyramids intuitively.	B

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-Q27  On the pin-board, Manson uses rubber bands to make ○ A. a right-angled triangle and an isosceles triangle. ○ B. an equilateral triangle and an isosceles triangle. ○ C. two equilateral triangles. ○ D. two isosceles triangles. Assessment focus: Identify isosceles triangles intuitively.	A. B. C. D. Correct Answer
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M1-Q28(a) Study the 2-D shape below. Write down all the letters for the answers.  List: (a) Right angle(s): _____ Assessment focus: Identify right angles.	a, d
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M1-Q28(b) (b) Obtuse angle(s): _____ Assessment focus: Identify obtuse angles.	c

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.	3M1-Q29 Which of the following figures is formed by a pair of perpendicular lines?  Assessment focus: Identify perpendicular lines.	A. B. C. Correct Answer D.
Directions and Positions	KS1-S5-1 Describe the relative positions of objects using “over”, “under”, “left”, “right”, “in front of”, “behind” and “between”.	3M1-Q30 Mr Lee puts some items on the shelf.  *  /  /  is between  and  . (*Circle the answer) Assessment focus: Describe the relative positions of objects using “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.	3M1-Q31(a) The map of a school is shown below.  (a) Starting from Staff Room, Mr Ho goes south to reach * Hall / Computer Room / Classroom . (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “Classroom”
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) Computer Room is to the * east / south / west / north of Library. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “east”

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M1-Q32(a) Alan did a survey of the number of balloons in different colours in the hall. **Number of Balloons in Different Colours in the Hall** Each ○ stands for 1 balloon  (a) The number of _____ balloons in the hall was the largest. There were _____ balloons. Assessment focus: Interpret pictograms with a one-to-one representation.	red, 7 respectively
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M1-Q32(b) (b) The number of orange balloons was _____ * more / less than that of blue balloons. (*Circle the answer) Assessment focus: Interpret pictograms with a one-to-one representation.	3, circle “less” respectively

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(1) Amy did a survey of the number of different kinds of clothes at home. Kind of clothes: Jacket, Shirt, Pants, Dress Number of clothes: 4, 6, 10, 8 According to the results, use a pencil to complete the following bar chart and give it a title. (Title) Assessment focus: Give an appropriate title for the bar chart.	Number of Different Kinds of Clothes at Home
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M1-Q33(2)  Assessment focus: Construct bar charts using a one-to-two representation.	Jacket: 2 boxes Shirt: 3 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 Which of the following numbers has the digit '5' in its hundreds place? ○ A. 315 ○ B. 5 920 ○ C. 7 513 ○ D. 80 054 Assessment focus: Demonstrate recognition of hundreds place.	A. B. C. Correct Answer D.
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 'eighty-three thousand and five' in numerals. Answer: _____ Assessment focus: Write numbers up to 5 digits.	83 005

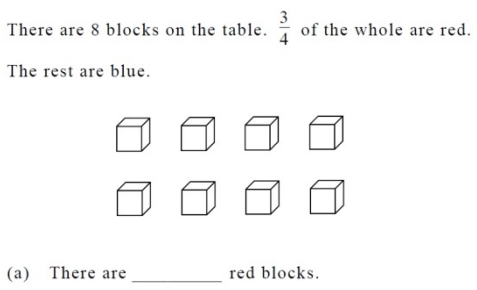
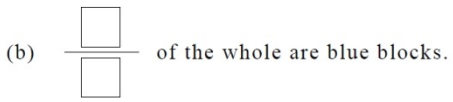
* Please refer to the BCA website (https://www.bca.hkeaa.edu.hk/web/TSA/en/BC/P_BC_M.pdf) for the Basic Competencies Descriptors documents

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).	3M2-Q03 $138 + 342 + 276 = \_\_\_\_\_$ Assessment focus: Perform addition.	756
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-Q04 $900 - 654 = \_\_\_\_\_$ Assessment focus: Perform subtraction.	246

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-Q05 $127 - (35 + 48) = \_\_\_\_\_$ Assessment focus: Perform mixed operations of addition and subtraction, involving using brackets.	44
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-Q06 $52 \times 6 = \_\_\_\_\_ \times 52$ Assessment focus: Use the commutative property of multiplication.	6

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 $614 \div 3 =$ ○ A. 240…2 ○ B. 204…2 ○ C. 204 ○ D. 24…2 Assessment focus: Perform division.	A. B. Correct Answer C. 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-Q08  Rice cooker 799 dollars  Bowl 18 dollars Mrs Tong buys a rice cooker and a bowl. She has to pay _____ dollars altogether. Assessment focus: Solve problems involving addition.	817

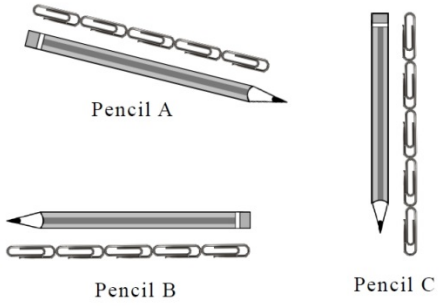
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M2-Q09 There are 7 boxes of oranges in a fruit shop. Each box contains 105 oranges. The fruit shop has _____ oranges altogether. Assessment focus: Solve problems involving multiplication.	735
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 Each apple costs 6 dollars. Miss Chan pays 100 dollars to buy 8 apples. How much change does she get? (Show your working) Assessment focus: Solve problems involving multiplication and subtraction.	$100 - 6 \times 8$ $= 52$ She gets 52 dollars change.
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 The shopkeeper needs 8 mooncakes to fill up a box. He has 97 mooncakes. At most, he can fill up ○ A. 12 boxes. ○ B. 13 boxes. ○ C. 89 boxes. ○ D. 776 boxes. Assessment focus: Solve problems involving division.	A. Correct Answer B. C. D.

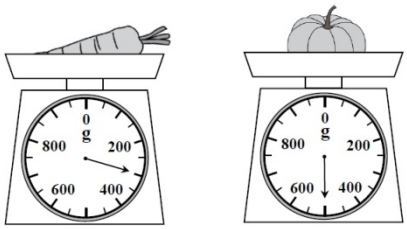
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M2-Q12(a)  Assessment focus: Demonstrate recognition of fractions as parts of one whole.	6
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M2-Q12(b)  Assessment focus: Demonstrate recognition of fractions as parts of one whole.	$\frac{1}{4}$ / $\frac{2}{8}$

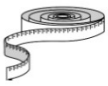
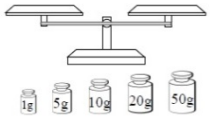
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M2-Q13 Which of the following is correct? ○ A. $9 < \frac{9}{9}$ ○ B. $9 = \frac{9}{9}$ ○ C. $9 > \frac{9}{9}$ ○ D. 9 and $\frac{9}{9}$ cannot be compared. Assessment focus: Demonstrate recognition of the relationship between fractions and the whole.	A. B. C. Correct Answer D.
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M2-Q14 Arrange the following fractions from the smallest to the largest. $\frac{3}{8}$, $\frac{7}{8}$, $\frac{3}{11}$ Answer: ☐ , ☐ , ☐ (Smallest) (Largest) Assessment focus: Compare the magnitude of fractions with same denominators or same numerators.	$\frac{3}{11}$, $\frac{3}{8}$, $\frac{7}{8}$ respectively

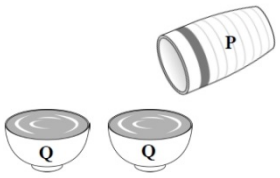
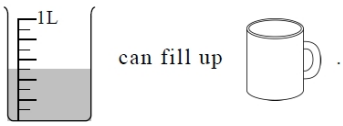
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M2-Q15 There is a bag of sweets on the table. Yuki takes $\frac{1}{8}$ of the bag of sweets. Terry takes $\frac{3}{8}$ of the bag of sweets. Roy takes $\frac{1}{8}$ of the bag of sweets. How much of the bag of sweets do they take altogether? Yuki takes:  Terry takes:  Roy takes:  (Show your working) Assessment focus: Solve problems involving addition of fractions with the same denominators that are illustrated by diagrams.	$\frac{1}{8} + \frac{3}{8} + \frac{1}{8}$ $= \frac{5}{8}$ They take $\frac{5}{8}$ of the bag of sweets altogether.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M2-Q16(a)  (a) A can of cookies costs _____ dollars and _____ cents. Assessment focus: Read price tags.	53, 70 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M2-Q16(b) (b) Joe buys a can of cookies. Circle the amount he should pay.  Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "$53.70"

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-Q17  Compare the lengths of the three pencils above. Pencil * A / B / C is the longest. (*Circle the answer) Assessment focus: Compare the lengths of objects in improvised units.	Circle “A”
Length and Distance	KS1-M2-7 Record the lengths of objects and the distances between objects in an appropriate single unit.	3M2-Q18 Fill in the following blank with a suitable unit. The height of a standard basketball stand is about 3 _____ . Assessment focus: Record the heights of objects in an appropriate unit.	metres/ m

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-Q19(a)  (a) The weight of  is _____ g. Assessment focus: Measure the weights of objects in "gram"(g).	500
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M2-Q19(b) (b)  is _____ g * lighter / heavier than  . (*Circle the answer) Assessment focus: Measure and compare the weights of objects in "gram"(g).	200, circle "lighter" respectively

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-4 Measure the weights of objects with appropriate tools.	3M2-Q20  Which of the following is most suitable for measuring the weight of a recorder?  ○ A.  1g 5g 10g 20g 50g ○ B.  kg ○ C.  ○ D. Assessment focus: Measure the weights of objects with appropriate tools.	A. B. Correct Answer C. D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Capacity	KS1-M5-1 Compare directly the capacities of containers.	3M2-Q21  Fill up container **P** with water and then pour all the water into two empty containers **Q**. The two containers **Q** are just filled up with the water. Which of the following is correct? ○ A. The capacity of one container **P** is greater than the capacity of one container **Q**. ○ B. The capacity of one container **P** is smaller than the capacity of one container **Q**. ○ C. The capacities of one container **P** and one container **Q** are the same. ○ D. The capacities of container **P** and container **Q** cannot be compared. Assessment focus: Compare directly the capacities of containers.	A. Correct Answer B. C. D.
Capacity	KS1-M5-3 Measure and compare the capacities of containers in “litre” (L) or “millilitre” (mL).	3M2-Q22   Assessment focus: Measure the capacities of containers in “millilitre” (mL).	500

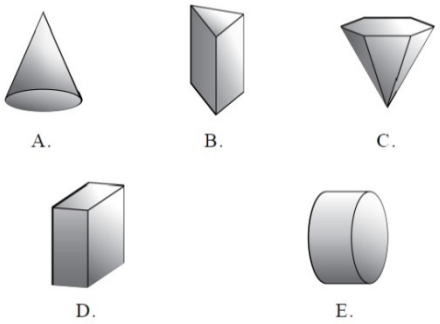
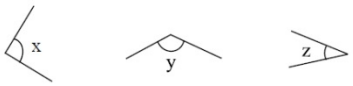
<table>
<tr><th>Learning Unit</th><th>Basic Competency Descriptor</th><th>Item Number</th><th>Option / Answer</th></tr>
<tr><td>Time</td><td>KS1-M3-4
Apply the “24-hour time”, involving the interconversion with the “12-hour time”.</td><td>3M2-Q23

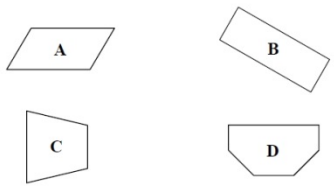
The timetable of making cakes in a cake shop is shown below.

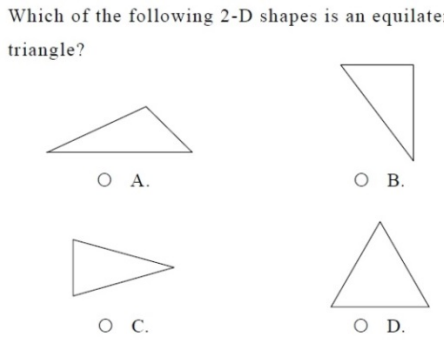
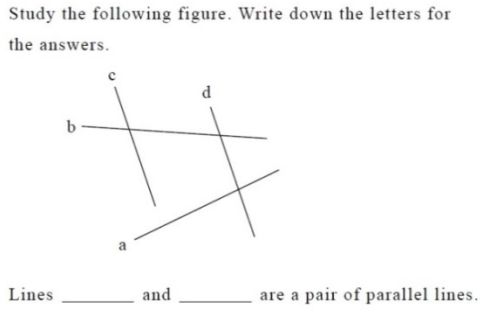
<table><tr><td></td><td>Starting time</td></tr><tr><td>The first batch</td><td>10:50</td></tr><tr><td>The second batch</td><td>13:20</td></tr><tr><td>The third batch</td><td>15:40</td></tr></table>
The starting time for making the third batch of cakes is _____ : _____ * a.m. / p.m.
(*Circle the answer)

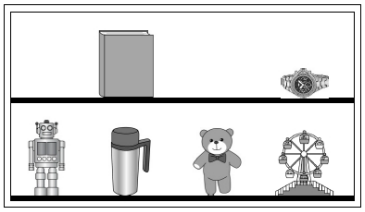
Assessment focus:
Apply the “24-hour time”.</td><td>3, 40, circle “p.m.” respectively</td></tr>
</table>

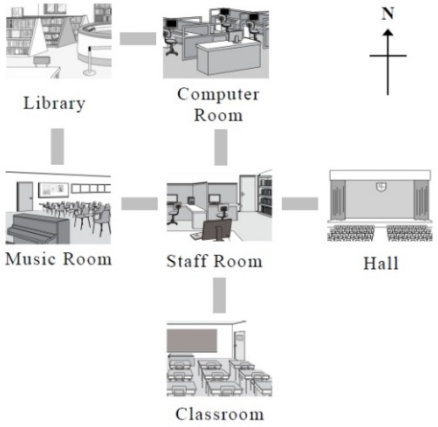
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-1 Demonstrate recognition of the dates and days of a week.	3M2-Q24(a) Answer the following questions according to the calendar for April below. **April** Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday 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) Sam's birthday is on the 17th of April. That day is _____ . (day of the week) Assessment focus: Demonstrate recognition of the days of a week.	Friday
Time	KS1-M3-1 Demonstrate recognition of the dates and days of a week.	3M2-Q24(b) (b) Sam is taking a trip to Beijing from the 9th of April to the 12th of April. The trip lasts for _____ days. Assessment focus: Demonstrate recognition of the dates.	4

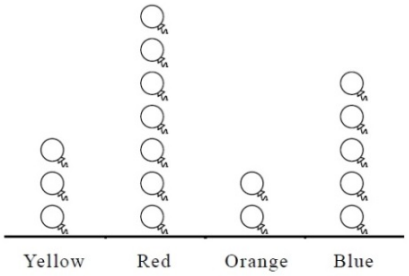
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M2-Q25(a) Study the 3-D shapes below. Write down all the letters for the answers.  List: (a) Cone(s): _____ Assessment focus: Identify cones intuitively.	A
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M2-Q25(b) (b) Prism(s): _____ Assessment focus: Identify prisms intuitively.	B, D
Angles	KS1-S4-2 Compare the sizes of angles.	3M2-Q26 Study the diagram below. Arrange the angles x, y and z from the smallest to the largest.  Answer: _____ , _____ , _____ (Smallest) (Largest) Assessment focus: Compare the sizes of angles.	z, x, y respectively

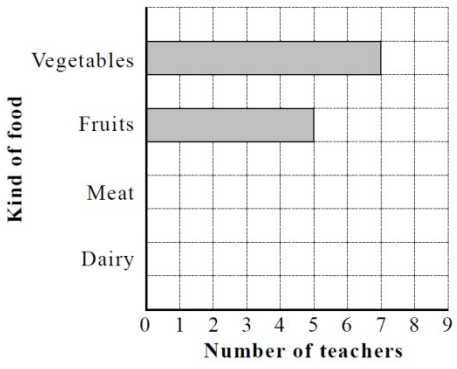
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M2-Q27(a) Study the 2-D shapes below. Write down all the letters for the answers.  List: (a) Trapezium(s): _____ Assessment focus: Identify trapeziums 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).	3M2-Q27(b) (b) Rectangle(s): _____ Assessment focus: Identify rectangles intuitively.	B

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-Q28  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-Q29  Assessment focus: Identify parallel lines.	c, d / d, c

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
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 some items on the shelf.  *  /  /  is between  and  . (*Circle the answer) Assessment focus: Describe the relative positions of objects using “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 map of a school is shown below.  (a) Starting from Staff Room, Mr Ho goes south to reach * Hall / Computer Room / Classroom . (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “Classroom”
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) Computer Room is to the * east / south / west / north of Library. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “east”

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M2-Q32(a) Alan did a survey of the number of balloons in different colours in the hall. **Number of Balloons in Different Colours in the Hall** Each ○ stands for 1 balloon  (a) The number of _____ balloons in the hall was the largest. There were _____ balloons. Assessment focus: Interpret pictograms with a one-to-one representation.	red, 7 respectively
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M2-Q32(b) (b) The number of orange balloons was _____ * more / less than that of blue balloons. (*Circle the answer) Assessment focus: Interpret pictograms with a one-to-one representation.	3, circle “less” respectively

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.	3M2-Q33(a) Fred did a survey of the favourite kinds of food of Primary Three teachers. (a) According to the record, complete the table below. Kind of food / Vegetables / Fruits / Meat / Dairy Record / 𝍸 || / 𝍸 / |||| / ||| Number of teachers / / / 4 / 3 Assessment focus: Complete the information in a table according to the record of a survey.	7, 5 respectively
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M2-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 an appropriate title for the bar chart.	Favourite Kinds of Food of Primary Three Teachers
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M2-Q33(b)(2)  Assessment focus: Construct bar charts using a one-to-one representation.	Meat: 4 boxes Dairy: 3 boxes

Sub-paper 3 (3ME3)

<table>
<tr><th>Learning Unit</th><th>Basic Competency Descriptor*</th><th>Item Number</th><th>Option / Answer</th></tr>
<tr><td>5-digit Numbers</td><td>KS1-N1-1
Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.</td><td>3M3-Q01

Write ‘eighty-three thousand and five’ in numerals.

Answer: _____

Assessment focus:
Write numbers up to 5 digits.</td><td>83 005</td></tr>
<tr><td>5-digit Numbers</td><td>KS1-N1-1
Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.</td><td>3M3-Q02

The following table shows the numbers of babies born in three cities last year.
<table><tr><td></td><td>City A</td><td>City B</td><td>City C</td></tr><tr><td>Number of babies born</td><td>9 316</td><td>20 547</td><td>19 906</td></tr></table>Arrange the numbers of babies born from the smallest to the largest.
Answer: _____ , _____ , _____
(Smallest) (Largest)

Assessment focus:
Order numbers up to 5 digits.</td><td>9 316, 19 906, 20 547 respectively</td></tr>
<tr><td>Four Arithmetic Operations</td><td>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).</td><td>3M3-Q03

247 + 15 + 356 =

○ A. 753
○ B. 618
○ C. 508
○ D. 262

Assessment focus:
Perform addition.</td><td>A.
B. Correct Answer
C.
D.</td></tr>
</table>

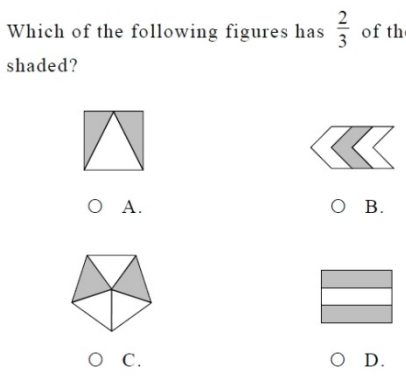
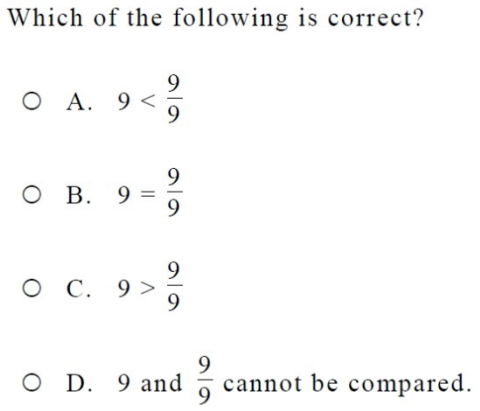
* Please refer to the BCA website(https://www.bca.hkeaa.edu.hk/web/TSA/en/BC/P_BC_M.pdf)for the Basic Competencies Descriptors documents

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 $765 - 213 - 13 =$ ○ A. 565 ○ B. 552 ○ C. 541 ○ D. 539 Assessment focus: Perform subtraction.	A. B. C. D. Correct 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-Q05 $243 \times 4 =$ _____ Assessment focus: Perform multiplication.	972

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-Q06 $504 \div 9 = \_\_\_\_\_$ Assessment focus: Perform division.	56
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-Q07 $50 - 10 \times 2 = \_\_\_\_\_$ Assessment focus: Perform mixed operations of multiplication and subtraction.	30

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-Q08 4 tickets cost 852 dollars altogether. On average, each ticket costs _____ dollars. Assessment focus: Solve problems involving division.	213
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  Rice cooker 799 dollars  Bowl 18 dollars Mrs Tong buys a rice cooker and a bowl. She has to pay _____ dollars altogether. Assessment focus: Solve problems involving addition.	817
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  Raincoat 40 dollars 80 cents  Umbrella 75 dollars 90 cents A raincoat is cheaper than an umbrella by _____ dollars and _____ cents. Assessment focus: Solve problems of calculation of money involving subtraction.	35, 10 respectively

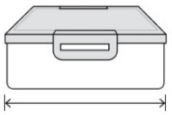
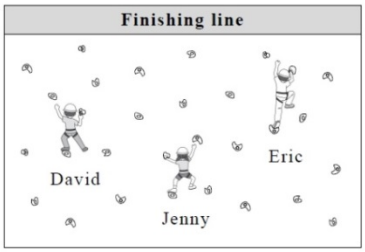
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M3-Q11 Maggie has 6 packets of stickers. Each packet contains 10 stickers. Ken has 48 stickers. He has _____ stickers fewer than Maggie has. Assessment focus: Solve problems involving multiplication and subtraction.	12
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-Q12 There are 276 people on a train originally. When the train arrives at the station, 53 people get off and 142 people get on. How many people are there on the train now? (Show your working) Assessment focus: Solve problems involving addition and subtraction.	276 – 53 + 142 = 365 There are 365 people on the train now.

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.	3M3-Q13  Assessment focus: Demonstrate recognition of fractions as parts of one whole.	A. B. C. D. Correct Answer
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M3-Q14  Assessment focus: Demonstrate recognition of the relationship between fractions and the whole.	A. B. C. Correct Answer D.

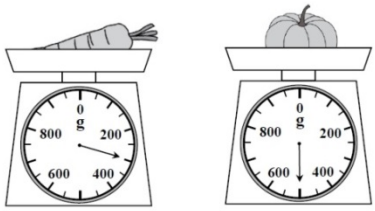
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M3-Q15 There is a bag of sweets on the table. Yuki takes $\frac{1}{8}$ of the bag of sweets. Terry takes $\frac{3}{8}$ of the bag of sweets. Roy takes $\frac{1}{8}$ of the bag of sweets. How much of the bag of sweets do they take altogether? Yuki takes:  Terry takes:  Roy takes:  (Show your working) Assessment focus: Solve problems involving addition of fractions with the same denominators that are illustrated by diagrams.	$\frac{1}{8} + \frac{3}{8} + \frac{1}{8}$ $= \frac{5}{8}$ They take $\frac{5}{8}$ of the bag of sweets altogether.
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M3-Q16 A community centre has some concert tickets. $\frac{1}{3}$ of the whole are adult tickets, $\frac{1}{6}$ of the whole are child tickets and $\frac{1}{2}$ of the whole are senior tickets. Most of the tickets are * adult tickets / child tickets / senior tickets . (*Circle the answer) Assessment focus: Compare the magnitude of fractions with same numerators.	Circle ‘senior tickets’

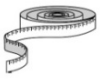
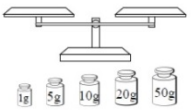
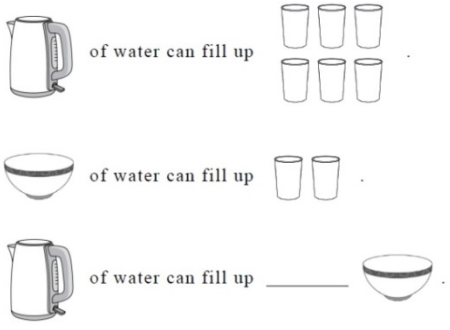
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-1 Identify the money in circulation in Hong Kong.	3M3-Q17 Daisy pays the following amount for books.      Daisy pays _____ dollars and _____ cents for books. Assessment focus: Identify the money in circulation in Hong Kong.	125, 30 respectively

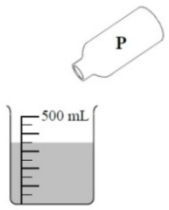
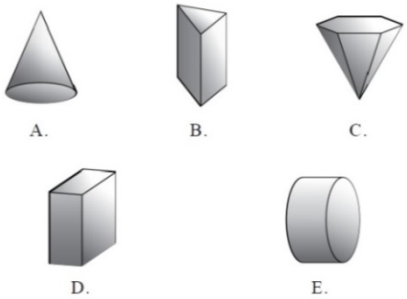
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-1 Demonstrate recognition of the dates and days of a week.	3M3-Q18(a) Answer the following questions according to the calendar for August below. **August** Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday 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) Karen joins a dance competition on the second Friday of August. That day is the _____ of _____ (month). Assessment focus: Demonstrate recognition of the dates.	14th, August respectively
Time	KS1-M3-1 Demonstrate recognition of the dates and days of a week.	3M3-Q18(b) (b) Karen has a singing class every Wednesday. She has _____ singing classes in August altogether. Assessment focus: Demonstrate recognition of the days of a week.	4

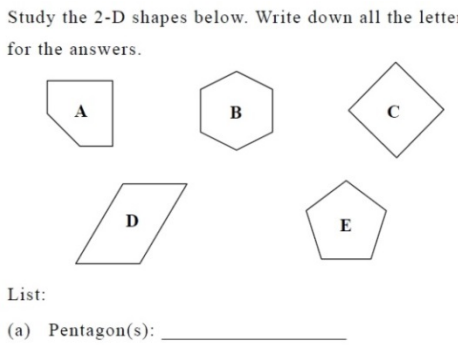
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-6 Measure the lengths of objects and the distances between objects with appropriate tools.	3M3-Q19  Which of the following is most suitable for measuring the length of a lunch box?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the lengths of objects with appropriate tools.	A. Correct Answer B. C. D.
Length and Distance	KS1-M2-1 Compare directly the lengths of objects and compare directly the distances between objects.	3M3-Q20  David, Jenny and Eric are taking part in a race of rock climbing. In the above figure, * David / Jenny / Eric is the nearest to the finishing line. (*Circle the answer) Assessment focus: Compare the distances between objects directly.	Circle “Eric”

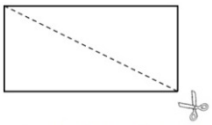
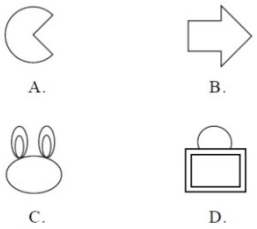
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Capacity	KS1-M5-5 Record the capacities of containers in an appropriate single unit.	3M3-Q21(a) Fill in the following blanks with suitable units. (a) The capacity of a tablespoon is about 15 _____ . Assessment focus: Record the capacities of containers in an appropriate unit.	millilitres / mL
Length and Distance	KS1-M2-7 Record the lengths of objects and the distances between objects in an appropriate single unit.	3M3-Q21(b) (b) The length of a tablet computer is about 24 _____ . Assessment focus: Record the lengths of objects in an appropriate unit.	centimetres / cm

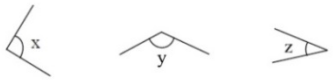
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M3-Q22(a)  (a) The weight of  is _____ g. Assessment focus: Measure the weights of objects in "gram"(g).	500
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M3-Q22(b) (b)  is _____ g * lighter / heavier than  . (*Circle the answer) Assessment focus: Measure and compare the weights of objects in "gram"(g).	200, circle "lighter" respectively

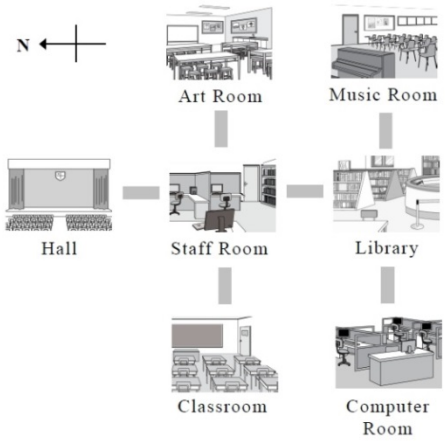
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-4 Measure the weights of objects with appropriate tools.	3M3-Q23  Which of the following is most suitable for measuring the weight of a recorder?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the weights of objects with appropriate tools.	A. B. Correct Answer C. D.
Capacity	KS1-M5-2 Compare the capacities of containers in improvised units.	3M3-Q24  Assessment focus: Compare the capacities of containers in improvised units.	3

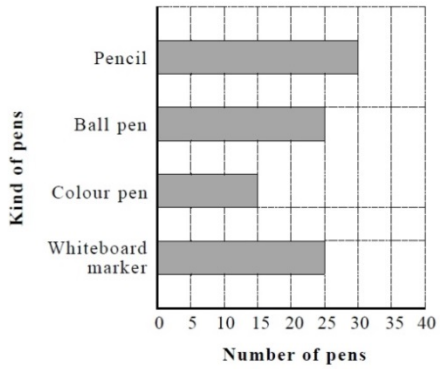
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Capacity	KS1-M5-3 Measure and compare the capacities of containers in "litre" (L) or "millilitre" (mL).	3M3-Q25 Fill up container **P** with water and then pour all the water into an empty measuring cup.  The capacity of container **P** is _____ mL. Assessment focus: Measure the capacities of containers in "millilitre" (mL).	350
3-D 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.  List: (a) Cone(s): _____ Assessment focus: Identify cones intuitively.	A
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M3-Q26(b) (b) Prism(s): _____ Assessment focus: Identify prisms intuitively.	B, D

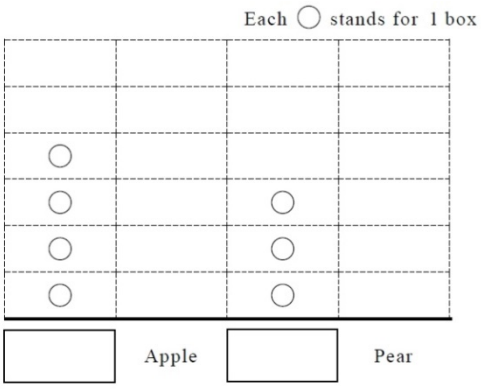
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M3-Q27(a)  Assessment focus: Identify pentagons intuitively.	A, E
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) Square(s): _____ Assessment focus: Identify squares intuitively.	C

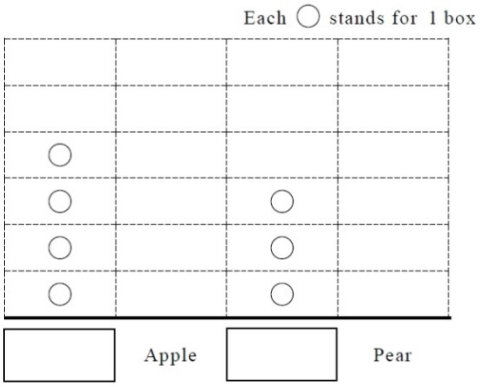
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-2 Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	3M3-Q28  Colin cuts the rectangle above along the dotted line. He gets two ○ A. isosceles triangles. ○ B. equilateral triangles. ○ C. right-angled triangles. ○ D. isosceles right-angled triangles. Assessment focus: Identify right-angled triangles intuitively.	A. B. C. Correct Answer D.
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M3-Q29(a) Study the figures below. Write down all the letters for the answers.  A. B. C. D. List: (a) The figure(s) formed by curve(s) only: _____ Assessment focus: Identify curves intuitively.	C
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M3-Q29(b) (b) The figure(s) formed by straight line(s) and curve(s): _____ Assessment focus: Identify straight lines and curves intuitively.	A, D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Angles	KS1-S4-2 Compare the sizes of angles.	3M3-Q30 Study the diagram below. Arrange the angles x, y and z from the smallest to the largest.  Answer: _____ , _____ , _____ (Smallest) (Largest) Assessment focus: Compare the sizes of angles.	z, x, y respectively

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 map of a school is shown below.  (a) Starting from Staff Room, Tracy goes * east / south / west / north to reach Hall. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “north”
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) * Computer Room / Staff Room / Music Room is to the west of Library. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “Computer Room”

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) A shopkeeper did a survey of the number of different kinds of pens sold at the stationery shop yesterday. **Number of Different Kinds of Pens Sold at the Stationery Shop Yesterday**  (a) The number of whiteboard markers sold and the number of _____ sold at the stationery shop were the same. The number of each kind of pens sold was _____ . Assessment focus: Interpret bar charts with a one-to-five representation.	ball pens, 25 respectively
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) The total number of pencils and colour pens sold at the stationery shop was _____ . Assessment focus: Interpret bar charts with a one-to-five representation.	45

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(1) A shopkeeper did a survey of the number of different kinds of fruits at the fruit shop. Kind of fruits: Orange, Apple, Banana, Pear Number of boxes: 4, 5, 3, 2 According to the results, complete the following pictogram and give it a title. (Title) Assessment focus: Give an appropriate title for the pictogram.	Number of Different Kinds of Fruits at the Fruit Shop
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M3-Q33(2)  Assessment focus: Fill in the appropriate types in the pictogram.	From left to right: Orange, Banana

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.	Apple: 5 pictures Pear: 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 Write a 5-digit number according to the instructions below. The digit '7' is in the hundreds place. The digit '2' is in the units place. The digit '0' is in the thousands place. The digit '3' is in the ten thousands place. The digit '8' is in the tens place. Assessment focus: Demonstrate recognition of units place to ten thousands place.	30 782
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 Three ***even numbers*** are arranged from the smallest to the largest as shown below. 51 374 (Smallest) , ? , 63 892 (Largest) The number in the box may be ○ A. 49 286. ○ B. 54 198. ○ C. 62 043. ○ D. 72 580. Assessment focus: Order numbers up to 5 digits.	A. B. Correct Answer C. D.

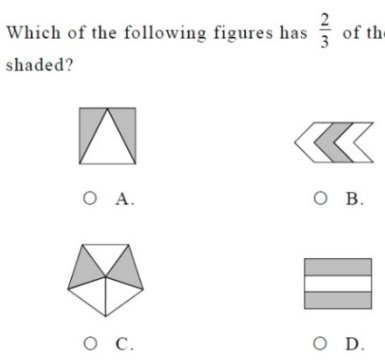
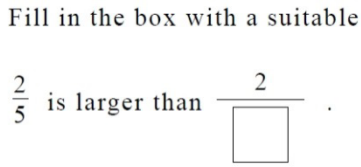
* Please refer to the BCA website (https://www.bca.hkeaa.edu.hk/web/TSA/en/BC/P_BC_M.pdf) for the Basic Competencies Descriptors documents

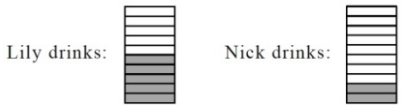
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M4-Q03 In the number 60 342, the digit '6' stands for * 6 / 60 / 600 / 6 000 / 60 000 . (*Circle the answer) Assessment focus: Demonstrate recognition of ten thousands place.	Circle "60 000"
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-Q04 453 + 197 = _____ Assessment focus: Perform addition.	650
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-Q05 679 – 185 – 237 = _____ Assessment focus: Perform subtraction.	257

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).	3M4-Q06 $2 \times 69 \times 5 = \_\_\_\_\_$ Assessment focus: Perform multiplication.	690
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-Q07 $724 \div 6 =$ ○ A. 12…4 ○ B. 104 ○ C. 120 ○ D. 120…4 Assessment focus: Perform division.	A. B. C. D. Correct Answer

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-Q08 $43 + 7 \times 9 =$ ○ A. 50 ○ B. 63 ○ C. 106 ○ D. 450 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.	3M4-Q09 Patrick got 258 points in a Mathematics game yesterday. Today he gets 146 points less than what he got yesterday. He gets _____ points today. Assessment focus: Solve problems involving subtraction.	112
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 4 tickets cost 852 dollars altogether. On average, each ticket costs _____ dollars. Assessment focus: Solve problems involving division.	213

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-Q11   Raincoat 40 dollars 80 cents Umbrella 75 dollars 90 cents A raincoat is cheaper than an umbrella by _____ dollars and _____ cents. Assessment focus: Solve problems of calculation of money involving subtraction.	35, 10 respectively
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 Alice has 5 packs of balloons originally. Each pack contains 3 balloons. After her brother gives her 14 balloons, how many balloons does Alice have now? (Show your working) Assessment focus: Solve problems involving multiplication and addition.	$3 \times 5 + 14$ $= 29$ Alice has 29 balloons now.

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.	3M4-Q13  Assessment focus: Demonstrate recognition of fractions as parts of one whole.	A. B. C. D. Correct Answer
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M4-Q14  Assessment focus: Compare the magnitude of fractions with same numerators.	Accept any whole number larger than 5

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).	3M4-Q15  $\frac{1}{9} + \frac{5}{9} + \frac{2}{9} = \frac{\square}{\square}$ Assessment focus: Perform addition of fractions with the same denominators.	$\frac{8}{9}$
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M4-Q16 Lily drinks $\frac{5}{10}$ of a carton of juice. Nick drinks $\frac{2}{10}$ of a carton of juice. How much more of a carton of juice does Lily drink than Nick?  Lily drinks: Nick drinks: (Show your working) Assessment focus: Solve problems involving subtraction of fractions with the same denominators that are illustrated by diagrams.	$\frac{5}{10} - \frac{2}{10}$ $= \frac{3}{10}$ Lily drinks $\frac{3}{10}$ more of a carton of juice than Nick.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M4-Q17(a)  (a) A cupcake costs _____ dollars and _____ cents. Assessment focus: Read price tags.	8, 40 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M4-Q17(b) (b) Carl pays  to buy a cupcake. Circle the change returned to Carl by the shopkeeper.  Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "$1.60"

<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>3M4-Q18(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></td><td></td><td>1</td></tr><tr><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr><tr><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td></tr><tr><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr><tr><td>30</td><td>31</td><td></td><td></td><td></td><td></td><td></td></tr></table>
(a) Karen joins a dance competition on the second Friday of August. That day is the _____ of _____ .
(month)

Assessment focus:
Demonstrate recognition of the dates.</td><td>14th, August respectively</td></tr>
<tr><td>Time</td><td>KS1-M3-1
Demonstrate recognition of the dates and days of a week.</td><td>3M4-Q18(b)

(b) Karen has a singing class every Wednesday. She has _____ singing classes in August altogether.

Assessment focus:
Demonstrate recognition of the days of a week.</td><td>4</td></tr>
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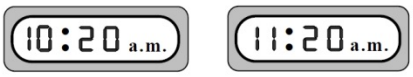
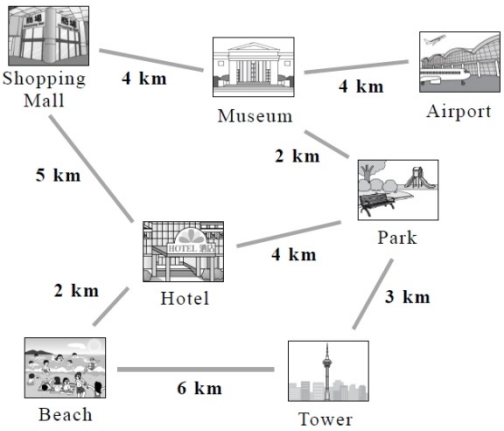
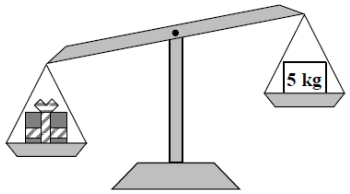
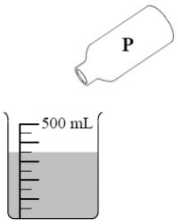
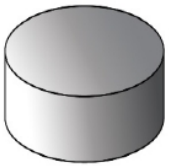
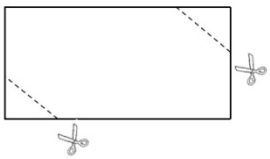
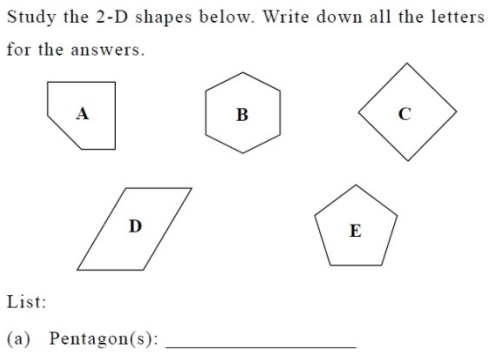
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	3M4-Q19(a) Mr Lee goes to the clinic to see a doctor. The two clocks below show the arriving time and the leaving time.  Arriving Time Leaving Time (a) Mr Lee arrives at _____ minute(s) past _____ in the * morning / afternoon . (*Circle the answer) Assessment focus: Tell time from a digital clock.	20, 10, circle "morning" respectively
Time	KS1-M3-3 Record the duration of time for different activities in "hours", "minutes" or "seconds"(not involving changing units).	3M4-Q19(b) (b) Mr Lee stays at the clinic for _____ hour(s). Assessment focus: Record the duration of time for different activities in "hours".	1

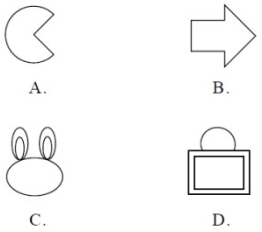
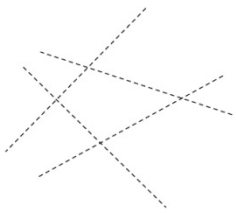
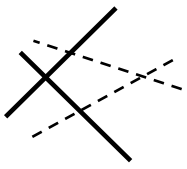
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-4 Compare the lengths of objects and compare the distances between objects in “kilometre” (km).	3M4-Q20(a) Study the following diagram and answer the questions below.  (a) It is only 10 km from Airport to Hotel passing through Museum and _____ . Assessment focus: Compare the distances between objects in “kilometre” (km).	Park
Length and Distance	KS1-M2-4 Compare the lengths of objects and compare the distances between objects in “kilometre” (km).	3M4-Q20(b) (b) The shortest route from Hotel to Tower is _____ km. Assessment focus: Compare the distances between objects in “kilometre” (km).	7

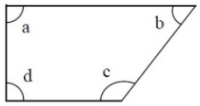
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-1 Compare directly the weights of objects.	3M4-Q21  The weight of  may be ○ A. 6 kg. ○ B. 5 kg. ○ C. 4 kg. ○ D. 3 kg. Assessment focus: Compare directly the weights of objects.	A. Correct Answer B. C. D.
Capacity	KS1-M5-3 Measure and compare the capacities of containers in "litre" (L) or "millilitre" (mL).	3M4-Q22 Fill up container **P** with water and then pour all the water into an empty measuring cup.  The capacity of container **P** is _____ mL. Assessment focus: Measure the capacities of containers in "millilitre" (mL).	350

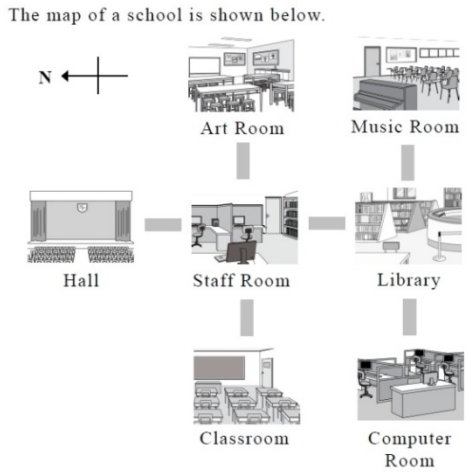
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-5 Record the weights of objects in an appropriate single unit.	3M4-Q23 Fill in the following blank with a suitable unit. The weight of an egg is about 60 _____ . Assessment focus: Record the weights of objects in an appropriate unit.	grams / g
Capacity	KS1-M5-4 Measure the capacities of containers with appropriate tools.	3M4-Q24  Which of the following is most suitable for measuring the capacity of a milk bottle?  ○ A.  ○ B.  ○ C.  ○ D. Assessment focus: Measure the capacities of containers with appropriate tools.	A. B. Correct Answer C. D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M4-Q25  The 3-D shape above is a ○ A. cylinder. ○ B. cone. ○ C. circle. ○ D. sphere. Assessment focus: Identify cylinder intuitively.	A. Correct Answer B. 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).	3M4-Q26  Angela cuts the rectangle above along the dotted lines. She gets two triangles and one * hexagon / parallelogram / rectangle . (*Circle the answer) Assessment focus: Identify hexagons intuitively.	Circle “ hexagon”

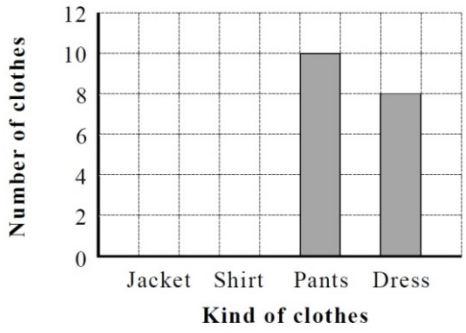
Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M4-Q27(a)  Assessment focus: Identify pentagons intuitively.	A, E
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-Q27(b) (b) Square(s): _____ Assessment focus: Identify squares intuitively.	C

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-Q28(a) Study the figures below. Write down all the letters for the answers.  List: (a) The figure(s) formed by curve(s) only: _____ Assessment focus: Identify curves intuitively.	C
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M4-Q28(b) (b) The figure(s) formed by straight line(s) and curve(s): _____ Assessment focus: Identify straight lines and curves intuitively.	A, D
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M4-Q29 In the figure below, draw along the dotted lines to show a pair of perpendicular lines.  Assessment focus: Identify perpendicular lines.	

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M4-Q30(a) Study the 2-D shape below. Write down all the letters for the answers.  List: (a) Right angle(s): _____ Assessment focus: Identify right angles.	a, d
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M4-Q30(b) (b) Obtuse angle(s): _____ Assessment focus: Identify obtuse angles.	c

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)  (a) Starting from Staff Room, Tracy goes * east / south / west / north to reach Hall. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “north”
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) * Computer Room / Staff Room / Music Room is to the west of Library. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north.	Circle “Computer Room”

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M4-Q32(a) Miss Chan did a survey of the number of pupils in each Primary Three class joining the football team. **Number of Pupils in Each Primary Three Class Joining the Football Team** Each ☺ stands for 1 pupil  (a) The number of pupils in Class _____ joining the football team was the smallest. There were _____ pupils. Assessment focus: Interpret pictograms with a one-to-one representation.	3D, 2 respectively
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M4-Q32(b) (b) The total number of Primary Three pupils joining the football team was _____ . Assessment focus: Interpret pictograms with a one-to-one representation.	20

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(1) Amy did a survey of the number of different kinds of clothes at home. Kind of clothes: Jacket, Shirt, Pants, Dress Number of clothes: 4, 6, 10, 8 According to the results, use a pencil to complete the following bar chart and give it a title. (Title) Assessment focus: Give an appropriate title for the bar chart.	Number of Different Kinds of Clothes at Home
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	3M4-Q33(2)  Assessment focus: Construct bar charts using a one-to-two representation.	Jacket: 2 boxes Shirt: 3 boxes