Territory-wide System Assessment 2025 (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 2025 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.	Write a 5-digit number according to the instructions below. The digit '8' is in the ten thousands place. The digit '1' is in the hundreds place. The digit '1' is in the units place. The digit '9' is in the tens place. The digit '5' is in the thousands place. Assessment focus: Demonstrate recognition of units place to ten thousands place.	85 291
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M1-Q02 Write 'seventy thousand and three' in numerals. Answer: Assessment focus: Write numbers up to 5 digits.	70 003

 $^{^* \} Please \ refer \ to \ the \ BCA \ website \ (\ \underline{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.	The following table shows the number of vehicles using the City Bridge in three days. Monday Tuesday Wednesday Number of 8 278 10 287 8 915 Arrange the number of vehicles from the largest to the smallest. Answer:	10 287, 8 915, 8 278 respectively
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.	Three odd numbers are arranged from the smallest to the largest as shown below. 39417 , ? , 40641 (Largest) The number in the box may be A. 38987. B. 39523. C. 39684. D. 40765. Assessment focus: Ordering numbers up to 5 digits.	A. B. Correct Answer C. D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M1-Q05 235 + 417 + 35 = O A. 652 O B. 677 O C. 687 O D. 1002 Assessment focus: Perform addition.	A. B. C. Correct Answer D.
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-Q06 303 - 185 = Assessment focus: Perform subtraction.	118

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 (not involving using brackets and performing mixed operations).	3M1-Q07 $6 \times 231 = \underline{\hspace{1cm}}$ Assessment focus: Perform multiplication.	1 386
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 (not involving using brackets and performing mixed operations).	3M1-Q08 762 ÷ 7 = O A. 186 O B. 108 O C. 1086 O D. 1806 Assessment focus: Perform division.	A. B. C. Correct Answer D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-3 Perform mixed operations of: (a) addition and subtraction, involving using brackets; (b) multiplication and addition, multiplication with numbers not greater than 10 (not involving using brackets); and (c) multiplication and subtraction, multiplication with numbers not greater than 10 (not involving using brackets) of three numbers at most.	3M1-Q09 37 - 8 × 3 = A. 13 B. 24 C. 29 D. 87 Assessment focus: Perform mixed operations of multiplication and subtraction.	A. Correct Answer B. 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.	3M1-Q10 There are 135 chairs in the hall. Ms Lee divides the chairs evenly into 9 rows. There are chairs in each row. Assessment focus: Solve problems involving division.	15
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 has 590 balloons. There are 382 balloons that are inflated. There are balloons that are not inflated. Assessment focus: Solve problems involving subtraction.	208

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M1-Q12 Sandy has 4 photo albums. Each album holds 230 photos. She has photos altogether. Assessment focus: Solve problems involving multiplication.	920
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.	Milk 9 dollars The convenience store is having a sale. Buying 4 cartons of milk gets 5 dollars off. Susan buys 4 cartons of milk. How much does she have to pay? (Show your working) Assessment focus: Solve problems involving mixed operations of multiplication and subtraction.	$9 \times 4 - 5$ $= 31$ She has to pay 31 dollars.

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.	Janet has 15 cups of juice. $\frac{2}{3}$ of the whole are orange juice. The rest are apple juice. (a) There are cups of orange juice. Assessment focus: Demonstrate recognition of fractions as a part of one whole.	10
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M1-Q14(b) (b) of the whole are apple juice. Assessment focus: Demonstrate recognition of fractions as a part of one whole.	$\frac{1}{3} / \frac{5}{15}$

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M1-Q15 Fill in the box with a suitable number. $\frac{1}{\frac{1}{\frac{1}{9}}}$ is smaller than $\frac{1}{9}$. Assessment focus: Compare the magnitude of fractions with same numerators.	Accept any whole number larger than 9
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M1-Q16 Mother buys a cake. Sean eats $\frac{1}{8}$ of the cake. Patrick eats $\frac{4}{8}$ of the cake. Yanny eats $\frac{2}{8}$ of the cake. How much of the cake do they eat altogether? Sean eats: Yanny eats: (Show your working) Assessment focus: Solve problems involving addition of fractions with the same denominators that are illustrated by diagrams.	$\frac{1}{8} + \frac{4}{8} + \frac{2}{8}$ $= \frac{7}{8}$ They eat $\frac{7}{8}$ of the cake altogether.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M1-Q17(a) \$77.90 (a) A calculator costs dollars and cents. Assessment focus: Read price tags.	77, 90 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M1-Q17(b) (b) Elise buys a calculator. Circle the amount she should pay. 50 20 20 20 30 Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "\$77.90"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-4 Measure the weights of objects with appropriate tools.	3M1-Q18	A. B.
	appropriate tools.	Which of the following is most suitable for measuring the weight of a pair of sports shoes?	C.
		○ A. ○ B.	D. Correct Answer
		○ C. ○ D.	
		Assessment focus: Measure the weight of objects with appropriate measuring tools.	
Length and Distance	KS1-M2-7 Record the lengths of objects and the distances between	3M1-Q19(a) Fill in the following blanks with suitable units.	kilometres / km
	objects in an appropriate single unit.	(a) The length of Tuen Mun Road is about 20 Assessment focus:	
		Record the lengths of objects in an appropriate unit.	
Weight	KS1-M4-5 Record the weights of objects in an appropriate single unit.	3M1-Q19(b) (b) The weight of a washing machine is about 80	kilograms / kg
		Assessment focus: Record the weights of objects in an appropriate unit.	

-	Descriptor	Item Number	Option / Answer
N th	Measure and compare the capacities of containers in "litre" (L) or "millilitre"	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).	600
and Constance of the co	KS1-M2-2 Compare the lengths of objects and compare the distances between objects in improvised units (e.g. a paper clip, a book).	Correction Pen Ball Pen Ball Pen Compare the lengths of the correction pen, the pencil and the ball pen above. The * correction pen / pencil / ball pen is the longest. (*Circle the answer) Assessment focus:	Circle "correction pen"

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(a) (a) The weight of is kg. Assessment focus: Measure the weights of objects in 'kilogram' (kg).	7
Weight	KS1-M4-3 Measure and compare the weights of objects in "gram"(g) or "kilogram" (kg).	3M1-Q22(b) (b) is kg * lighter / heavier than (*Circle the answer) Assessment focus: Measure and compare the weights of objects in 'kilogram' (kg).	4, circle "heavier" respectively

Learning Unit	Basic Competency Descriptor			Iten	n Nun	ıber			Option / Answer
Time	KS1-M3-1 Demonstrate recognition of the dates and days of a week.	1000			mestions .	accordin	g to the		18 th , May respectively
	week.	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	30	31	
		Asses Demon	y is the sment	focus		(month)	- ·		
Time	KS1-M3-1 Demonstrate recognition of the	3M1-Q		a swimi	ning cla	ss every	/ Thurs	day	5
	dates and days of a week.				_ swimr				
		Asses	sment	focu	s:				
		Demon				the day	es of a	week.	

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M1-Q24(a) Study the 3-D shapes below. Write down all the letters for the answers. A. B. C. D. E. List: (a) Cylinder(s): Assessment focus: Identify cylinders.	C, E
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M1-Q24(b) (b) Sphere(s): Assessment focus: Identify spheres.	D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-2 Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	Which of the following 2-D shapes is an equilateral triangle? O A. O B. O C. O D. Assessment focus: Identify equilateral triangles.	A. B. C. D. Correct Answer
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M1-Q26 Which of the following figures is formed by a pair of perpendicular lines? O A. O B. Assessment focus: Identify perpendicular lines.	A. B. Correct Answer C. D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	Peter cuts the rectangle above along the dotted line. He gets one triangle and one * rectangle / trapezium / pentagon . (*Circle the answer) Assessment focus: Identify trapeziums.	Circle "trapezium"
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M1-Q28(a) Study the figures below. Write down all the letters for the answers. A. B. C. D. List: (a) The figure(s) formed by straight line(s) only: ———— Assessment focus: Identify straight lines.	D
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M1-Q28(b) (b) The figure(s) formed by straight line(s) and curve(s): Assessment focus: Identify straight lines and curves.	В, С

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Angles	KS1-S4-2 Compare the sizes of angles.	3M1-Q29 Study the diagram below. Arrange the angles x, y and z from the smallest to the largest. Answer:,,,	y, z, x respectively
Directions and Positions	KS1-S5-1 Describe the relative positions of objects using "over", "under", "left", "right", "in front of", "behind" and "between".	3M1-Q30 Mr Lee puts a picture on a wall. * is under (*Circle the answer) Assessment focus: Describe the relative positions of objects using "over" and "under".	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.	The location map of a training camp is shown below. Car Park Car Park Canteen Computer Room Basketball Court Stage Bus Stop (a) * Stage / Car Park / Computer Room is to the east of Canteen. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Stage"
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) Starting from Stage, Tiffany goes * east / south / west / north to reach Bus Stop. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "north"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	Ms Cheung did a survey of the number of pupils in each primary three class who wants to be a doctor. Number of Pupils in Each Primary Three Class Who Wants to be a Doctor Each : stands for 1 pupil 3A : : : : : : : : : : : : : : : : : : :	3B, 6 respectively
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M1-Q32(b) (b) The total number of primary three pupils who wants to be a doctor was Assessment focus: Interpret pictograms with a one-to-one representation.	21

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) Ms Tsang did a survey of the favourite Olympic events of P.3B pupils. Olympic swimming Diving Table Tennis Fencing Number of pupils 5 3 4 8 According to the results, use a pencil to complete the following bar chart and give it a title. (Title) Assessment focus: Give a title for the bar chart.	Favourite Olympic events of P.3B pupils
Bar Charts	KS1-D2-2 Construct bar charts using a one-to-one, one-to-two or one-to-five representation.	Swimming Diving Table Tennis Fencing 0 1 2 3 4 5 6 7 8 9 Number of pupils Assessment focus: Construct bar charts using a one-to-one representation.	Diving: 3 boxes Table Tennis: 4 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.	Write a 5-digit number according to the instructions below. The digit '8' is in the ten thousands place. The digit '2' is in the hundreds place. The digit '1' is in the units place. The digit '9' is in the tens place. The digit '5' is in the thousands place. Assessment focus: Demonstrate recognition of units place to ten thousands place.	85 291
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.	Three odd numbers are arranged from the smallest to the largest as shown below. 39 417 , ? , 40 641 (Smallest) (Largest) The number in the box may be A. 38 987. B. 39 523. C. 39 684. D. 40 765. Assessment focus: Ordering numbers up to 5 digits.	A. B. Correct Answer C. 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-Q03 In the number 54 310, the digit '3' stands for * 3 / 30 / 300 / 3 000 / 30 000 . (*Circle the answer) Assessment focus: Demonstrate recognition of hundreds place.	Circle "300"

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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	3M2-Q04 486 + 257 = Assessment focus:	743
	properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	Perform addition.	
Four Arithmetic Operations	KS1-N2-1 Perform addition and subtraction of three 3-digit numbers at most, and use the commutative and associative properties of addition (not involving using brackets, performing addition with carry in three steps and performing mixed operations).	3M2-Q05 854 - 236 - 365 = Assessment focus: Perform subtraction.	253
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 ⊓umbers, division up to 3-digit numbers by 1-digit numbers (not involving using brackets and performing mixed operations).	3M2-Q06 284 × 9 = Assessment focus: Perform multiplication.	2 556

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 378 ÷ 4 = O A. 901 O B. 92 O C. 94 O D. 942 Assessment focus: Perform division.	A. B. C. D. Correct 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-Q08 765 - (14 + 29) = Assessment focus: Perform mixed operations of addition and subtraction, involving using brackets.	722

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.	Milk 9 dollars The convenience store is having a sale. Buying 4 cartons of milk gets 5 dollars off. Susan buys 4 cartons of milk. How much does she have to pay? (Show your working) Assessment focus: Solve problems involving mixed operations of multiplication and subtraction.	$9 \times 4 - 5$ = 31 She has to pay 31 dollars.
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 The shopkeeper has 590 balloons. There are 382 balloons that are inflated. There are balloons that are not inflated. Assessment focus: Solve problems involving subtraction.	208

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-Q11 There are some apple pies in a bakery. The shopkeeper sells 252 pies in the morning and 450 pies in the afternoon. There are 66 pies left. How many apple pies are there at first? (Show your working) Assessment focus:	252 + 450 + 66 = 768 There are 768 apple pies at first.
		Solve problems involving addition.	
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	Choose the equivalent fraction(s) of $\frac{1}{3}$ below. Write down all the letter(s) for the answer. $ \frac{2}{6} \frac{2}{4} \frac{4}{12} \frac{4}{12} $ A. B. C. Answer: Assessment focus: Demonstrate recognition of the diagrams representing equivalent fractions.	A, C

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M2-Q13(a) (a) Fill in the box with a suitable number. is larger than $\frac{7}{15}$. Assessment focus: Compare the magnitude of fractions with same denominators.	Accept any whole number larger than 7
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M2-Q13(b) (b) 11/11 is equal to * 22 / 11 / 1 . (*Circle the answer) Assessment focus: Demonstrate recognition of the relationship between fractions and the whole.	Circle "1"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M2-Q14 There are some animals in the aquarium. $\frac{1}{5}$ of the whole are sharks, $\frac{1}{2}$ of the whole are sea turtles, and $\frac{1}{10}$ of the whole are clownfishes. Most of the animals are * sharks / sea turtles / clownfishes . (*Circle the answer) Assessment focus: Compare the magnitude of fractions with same numerators.	Circle "sea turtles"
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).	3M2-Q15 $\frac{5}{6} - \frac{1}{6} - \frac{3}{6} = {}$ Assessment focus: Perform subtraction of fractions with the same denominators.	1/6

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M2-Q16(a) \$ 77.90 (a) A calculator costs dollars and cents. Assessment focus: Read price tags.	77, 90 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) Elise buys a calculator. Circle the amount she should pay. 50 20 20 20 Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "\$77.90"

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".	Which of the following is most suitable for measuring the length of a box of cold medicine? A. OB. Assessment focus: Measure the length of an object with an appropriate 'ever-ready ruler'.	A. B. C. D. Correct Answer
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 thickness of a five-dollar coin is about 3 Assessment focus: Record the lengths of objects with an appropriate unit.	millimetres / mm

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Length and Distance	KS1-M2-1 Compare the length of objects and the distance between objects directly.	3M2-Q19 Hot Air Balloon Flane Ground In the above figure, * Hot air balloon / Plane / Helicopter is the farthest from the ground. (*Circle the answer) Assessment focus: Compare the distance between objects directly.	Circle "Plane"
Capacity	KS1-M5-4 Measure the capacities of containers with appropriate tools.	Which of the following is most suitable for measuring the capacity of a cup? O A. O B. Assessment focus: Measure the capacities of containers with appropriate tools.	A. B. C. Correct Answer D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	3M2-Q21(a) Coey joins a travel tour to Beijing. The clock above shows the meeting time of the tour. (a) The meeting time of the tour is at minute(s) past in the morning. Assessment focus: Tell time from an analog clock.	25, 10 respectively
Time	KS1-M3-3 Record the duration of time for different activities in "hours", "minutes" or "seconds"(not involving changing units).	3M2-Q21(b) (b) Coey arrives 5 minutes earlier than the meeting time. She arrives at the meeting point at minute(s) past in the morning. Assessment focus: Find the starting time of an activity.	20, 10 respectively

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-1 Compare directly the weights of objects.	3M2-Q22 The weight of may be O A. 5 kg.	A. Correct Answer B. C. D.
		 O B. 6 kg. O C. 7 kg. D. 8 kg. Assessment focus: Compare the weights of objects directly.	
Capacity	KS1-M5-3 Measure and compare the capacities of containers in "litre" (L) or "millilitre" (mL).	The capacity of is mL. Assessment focus: Measure the capacities of a containers in "millilitre" (mL).	700

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).	The weight of is g. Assessment focus: Measure the weights of objects in 'gram' (g).	500
Capacity	KS1-M5-1 Compare directly the capacities of containers.	Fill up the container P with water and then pour all the water into the empty container Q. Water spills out from container Q. Which of the following is correct? O A. The capacity of P is greater than the capacity of Q. O B. The capacity of P is smaller than the capacity of Q. O C. The capacities of P and Q are the same. O D. The capacities of P and Q cannot be compared. Assessment focus: Compare directly the capacities of containers.	A. Correct Answer B. C. D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D	KS1-S1-1	3M2-Q26(a)	B, E
Shapes	Identify prisms, pyramids, cylinders, cones and spheres intuitively.	Study the 3-D shapes below. Write down all the letters for the answers. A. B. C. D. E. List: (a) Prism(s): Assessment focus: Identify prisms.	
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M2-Q26(b) (b) Pyramid(s): Assessment focus: Identify pyramids.	A

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. B C List: (a) Square(s): Assessment focus: Identify squares.	В
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) Pentagon(s): Assessment focus: Identify pentagons.	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.	3M2-Q28 Which of the following figures is formed by a pair of perpendicular lines? O A. O B. Assessment focus: Identify perpendicular lines.	A. B. Correct Answer C. D.
2-D Shapes	KS1-S2-2 Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	On the pin-board, Simon uses rubber bands to make A. two right-angled triangles. B. two isosceles triangles. C. an isosceles triangle and a right-angled triangle. D. an equilateral triangle and a right-angled triangle. Assessment focus: Identify isosceles triangles and right-angled triangles.	A. B. C. Correct Answer D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M2-Q30(a) Study the 2-D shapes below. Write down all the letters for the answers. A. B. C. D. (a) List the figure(s) with right angle(s). Answer: Assessment focus: Identify right angles.	B
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M2-Q30(b) (b) List the figure(s) with obtuse angle(s). Answer: Assessment focus: Identify obtuse angles.	C, D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	The location map of a training camp is shown below. Car Park Canteen Computer Room Canteen Computer Room Basketball Court Stage Bus Stop (a) * Stage / Car Park / Computer Room is to the east of Canteen. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Stage"
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M2-Q31(b) (b) Starting from Stage, Tiffany goes * east / south / west / north to reach Bus Stop. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "north"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M2-Q32(a) Ms Chan did a survey of the favourite kinds of cake of P.3A pupils. Favourite Kinds of Cake of P.3A Pupils Each stands for 1 pupil Mango Chocolate Lemon Cheese (a) The number of pupils who favoured cake was the most. There were pupils. Assessment focus: Interpret pictograms with a one-to-one representation.	mango, 7 respectively
Pictograms	KS1-D1-1 Interpret pictograms with a one-to-one representation.	3M2-Q32(b) (b) The number of pupils who favoured chocolate cake was * more / less than that of pupils who favoured lemon cake. (*Circle the answer) Assessment focus: Interpret pictograms with a one-to-one representation.	3, circle "more" 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.	Charles did a survey of the number of different toys in the toy box. (a) According to the record, complete the table below. Toy Robot Ball Toy Car Chess Record ###	8, 6 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 a title for the bar chart.	Number of different toys in the toy box
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) 14 12 10 8 10 8 6 4 2 0 Robot Ball Toy Chess Car Toy Assessment focus: Construct bar charts using a one-to-two representation.	Ball: 2 boxes Chess: 1 box

Sub-paper 3 (3ME3)

Learning Unit 5-digit Numbers	Basic Competency Descriptor* KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	Item Number 3M3-Q01 In which of the following numbers is the digit '6' in the ten thousands place? O A. 6 731 O B. 34 968 O C. 59 642 O D. 61 459 Assessment focus:	A. B. C. D. Correct Answer
		Demonstrate recognition of ten thousands place.	
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M3-Q02 In the number 54 310, the digit '3' stands for * 3 / 30 / 300 / 3 000 / 30 000 . (*Circle the answer) Assessment focus: Demonstrate recognition of hundreds place.	Circle "300"
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-Q03 890 - 438 - 38 = O A. 72 O B. 414 O C. 452 O D. 490 Assessment focus: Perform subtraction.	A. B. Correct Answer C. D.

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

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four	KS1-N2-1	3M3-Q04	743
Arithmetic	Perform addition and		
Operations	subtraction of three 3-digit	486 + 257 =	
	numbers at most, and use the		
	commutative and associative		
	properties of addition (not	Assessment focus:	
	involving using brackets,	Perform addition.	
	performing addition with		
	carry in three steps and		
	performing mixed		
	operations).		
Four	KS1-N2-2	3M3-Q05	2 030
Arithmetic	Perform multiplication and		
Operations	division of three numbers at	406 × 5 =	
	most, and use the		
	commutative and associative	Assessment focus:	
	properties of multiplication,	Perform 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).		
Four	KS1-N2-2	3M3-Q06	A.
Arithmetic	Perform multiplication and		11.
Operations	division of three numbers at	378 ÷ 4 =	B.
	most, and use the	2000 1700 MARKET 1 MI	Б.
	commutative and associative	O A. 901	C.
	properties of multiplication,	О В. 92	
	multiplication up to 3-digit	5-0-3-6 (20-0000) - (-000-02-00)	D. Correct Answer
	numbers by 1-digit numbers,	O C. 94	Coffeet Aliswei
	division up to 3-digit	O D. 942	
	numbers by 1-digit numbers	A-State and resident	
	(not involving using	Assessment focus:	
	brackets and performing	Perform division.	
	mixed operations).	,	

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.	3M3-Q07 23 + 5 × 7 = Assessment focus: Perform mixed operations of multiplication and addition.	58
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.	There are 217 comic books on the bookshelf. The number of comic books is 53 fewer than the number of novels. There are novels on the bookshelf. Assessment focus: Solve problems involving addition.	270

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.	There are 6 pieces of chocolate cookie in a box. Mother buys 2 boxes of chocolate cookie and 3 pieces of butter cookie. She buys pieces of cookie altogether. Assessment focus: Solve problems involving mixed operations of multiplication and addition.	15
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.	School uniform 235 dollars Mandy has 600 dollars. After buying a school uniform and a jacket, she has dollars left. Assessment focus: Solve problems involving subtraction.	77

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 There are some apple pies in a bakery. The shopkeeper sells 252 pies in the morning and 450 pies in the afternoon. There are 66 pies left. How many apple pies are there at first? (Show your working) Assessment focus: Solve problems involving addition.	252 + 450 + 66 = 768 There are 768 apple pies at first.
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	Bowl Cup 14 dollars A bowl is more expensive than a cup by dollars and cents. Assessment focus: Solve problems of calculation of money involving subtraction.	11, 50 respectively

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	Mr Chan has 386 table tennis balls. Each container can store 8 balls. To store all the balls, Mr Chan needs at least O A. 48 containers. O B. 49 containers. O C. 378 containers. O D. 3 088 containers. Assessment focus: Solve problems involving division.	A. B. Correct Answer C. D.
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M3-Q14 \[\frac{7}{7} \text{ is * smaller than } / \text{ equal to } / \text{ larger than } 7. \] (*Circle the answer) Assessment focus: Demonstrate recognition of the relationship between fractions and the whole.	Circle "smaller than"
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M3-Q15 Which figure below shows that $\frac{5}{6}$ of the whole is shaded? O A. O B. O C. O D. Assessment focus: Demonstrate recognition of fractions as parts of one whole.	A. B. C. Correct Answer D.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-3 Compare the magnitude of fractions with same denominators or same numerators.	3M3-Q16 Arrange the following fractions from the largest to the smallest. $\frac{5}{13}$, $\frac{5}{8}$, $\frac{3}{13}$ Answer: (Largest), (Smallest) Assessment focus: Compare the magnitude of fractions with same denominators or same numerators.	$\frac{5}{8}, \frac{5}{13}, \frac{3}{13}$ respectively
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M3-Q17 There is $\frac{8}{9}$ of a box of paper in the office at first. Wilson takes $\frac{4}{9}$ of the box of paper. Mary takes $\frac{3}{9}$ of the box of paper. How much of the box of paper is left? Box of paper at first: Wilson takes: Wilson takes: Wilson takes: Wilson takes: Show your working) Assessment focus: Solve problems involving subtraction of fractions with the same denominators that are illustrated by diagrams.	$\frac{8}{9} - \frac{4}{9} - \frac{3}{9}$ $= \frac{1}{9}$ $\frac{1}{9}$ of the box of paper is left.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-2 Read price tags.	3M3-Q18(a) \$ 17.90 (a) A box of pencil costs dollars and cents. Assessment focus: Read price tags.	17, 90 respectively
Money	KS1-M1-3 Demonstrate recognition of the use of money in daily life, involving counting notes and coins and exchanging money.	3M3-Q18(b) (b) Kelvin pays Circle the change returned to Kelvin by the shopkeeper. Assessment focus: Demonstrate recognition of the use of money in daily life.	Circle the amount of "\$2.10"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Money	KS1-M1-1 Identify the money in circulation in Hong Kong.	Ethan pays the following amount for souvenirs. 100	153, 50 respectively
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).	Jama-Q20 Use a ruler to measure the length of the student ID card below. Heung Shing Primary School Name: Chan Siu Ming Class: P.3A The length of the student ID card is cm. Assessment focus: Measure the lengths of objects in 'centimetre' (cm).	8

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

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.	Which of the following is most suitable for measuring the height of a bookshelf? A. B. Assessment focus: Measure the lengths of objects with appropriate measuring tools.	A. B. C. D. Correct Answer
Weight	KS1-M4-5 Record the weights of objects in an appropriate single unit.	3M3-Q23(a) Fill in the following blanks with suitable units. (a) The weight of a mobile phone is about 200 Assessment focus: Record the weights of objects in an appropriate unit.	grams / g
Length and Distance	KS1-M2-7 Record the lengths of objects and the distances between objects in an appropriate single unit.	3M3-Q23(b) (b) The length of a chopstick is about 15 Assessment focus: Record the lengths of objects in an appropriate unit.	centimetres / cm

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	3M3-Q24(a) Coey joins a travel tour to Beijing. The clock above shows the meeting time of the tour. (a) The meeting time of the tour is at minute(s) past in the morning. Assessment focus: Tell time from an analog clock.	25, 10 respectively
Time	KS1-M3-3 Record the duration of time for different activities in "hours", "minutes" or "seconds"(not involving changing units).	3M3-Q24(b) (b) Coey arrives 5 minutes earlier than the meeting time. She arrives at the meeting point at minute(s) past in the morning. Assessment focus: Find the starting time of an activity.	20, 10 respectively

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Capacity	KS1-M5-4 Measure the capacities of containers with appropriate tools.	Which of the following is most suitable for measuring the capacity of a cup? O A. O B. Assessment focus: Measure the capacities of containers with appropriate tools.	A. B. C. Correct Answer D.
2-D Shapes	KS1-S2-2 Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	3M3-Q26 Which of the following 2-D shapes is an isosceles right-angled triangle? O A. O B. Assessment focus: Identify isosceles right-angled triangles.	A. Correct Answer B. 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.	3M3-Q27(a) Study the 3-D shapes below. Write down all the letters for the answers. A. B. C. List: (a) Prism(s): Assessment focus: Identify prisms.	B, E
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M3-Q27(b) (b) Pyramid(s): Assessment focus: Identify pyramids.	A

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-Q28(a) Tony uses different 2-D shapes to form a picture. (a) There is / are rectangle(s) in the picture above. Assessment focus: Identify rectangles.	3
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-Q28(b) (b) There is / are circle(s) in the picture above. Assessment focus: Identify circles.	4
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M3-Q29 Study the following figure. Write down the letters for the answers. Lines and are a pair of parallel lines. Assessment focus: Identify parallel lines.	a, b / b, a

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M3-Q30(a) Study the 2-D shapes below. Write down all the letters for the answers. A. B. C. D. (a) List the figure(s) with right angle(s). Answer: Assessment focus: Identify right angles.	B
Angles	KS1-S4-1 Identify right angles, acute angles and obtuse angles.	3M3-Q30(b) (b) List the figure(s) with obtuse angle(s). Answer: Assessment focus: Identify obtuse angles.	C, D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	3M3-Q31(a) The location map of a training camp is shown below. Car Park Car Park Bus Stop (a) Starting from Computer Room, Aden goes south to reach * Car Park / Bus Stop / Canteen (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Bus Stop"
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) Stage is to the * east / south / west / north of Bus Stop. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "west"

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.	The snack shop sells four kinds of snacks. A shopkeeper did a survey of the number of snacks sold yesterday. Number of Snacks Sold Yesterday Hot Dog Sausage Cookie Chicken Wing 0 5 10 15 20 25 30 35 40 Number of sets (a) The snack sold the most was There were sets. Assessment focus: Interpret bar charts with a one-to-five representation.	sausage, 35 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 snacks sold yesterday was sets. Assessment focus: Interpret bar charts with a one-to-five representation.	90

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	Number of	The number of new books in the library
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	Each Stands for 1 Stands for 1 Art Travel Assessment focus: Construct pictograms using a one-to-one representation.	From left to right: Science, Language

Learning Unit	Basic Competency Descriptor		Item	Option / Answer		
Pictograms	KS1-D1-2	3M3-Q33	(3)			Art: 4 pictures
	Construct pictograms					Travel: 2 pictures
	using a one-to-one			Each Os	tands for 1 book	
	representation.	0				
		0		0		
		0		0		
		0		0		
		0		0		
		0		0	-+	
			Art		Travel	
		Assessment Construct representa	pictograms u	sing a one-	-to-one	

Sub-paper 4 (3ME4)

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M4-Q01 In which of the following numbers is the digit '6' in the ten thousands place? O A. 6731 O B. 34968 O C. 59642 O D. 61459 Assessment focus: Demonstrate recognition of ten thousands place.	A. B. C. D. Correct Answer
5-digit Numbers	KS1-N1-1 Demonstrate recognition of places (units place to ten thousands place), involving reading, writing and ordering numbers up to 5 digits.	3M4-Q02 Write 'seventy thousand and three' in numerals. Answer: Assessment focus: Write numbers up to 5 digits.	70 003
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.	The following table shows the number of vehicles using the City Bridge in three days. Monday Tuesday Wednesday Number of 8 278 10 287 8 915 Arrange the number of vehicles from the largest to the smallest. Answer:	10 287, 8 915, 8 278 respectively

^{*} 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).	3M4-Q04 132 + 259 + 117 = Assessment focus: Perform addition.	508
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 890 - 438 - 38 = O A. 72 O B. 414 O C. 452 O D. 490 Assessment focus: Perform subtraction.	A. B. Correct Answer C. D.
Four Arithmetic Operations	KS1-N2-2 Perform multiplication and division of three numbers at most, and use the commutative and associative properties of multiplication, multiplication up to 3-digit numbers by 1-digit numbers, division up to 3-digit numbers by 1-digit numbers by 1-digit numbers and performing using brackets and performing mixed operations).	3M4-Q06 2 × 347 = × 2 Assessment focus: Use the commutative property of multiplication.	347

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations Four	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). KS1-N2-3:	3M4-Q07 984 ÷ 8 = Assessment focus: Perform division.	123
Arithmetic Operations	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.	23 + 5 × 7 = Assessment focus: Perform mixed operations of multiplication and addition.	
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q09 There are 217 comic books on the bookshelf. The number of comic books is 53 fewer than the number of novels. There are novels on the bookshelf. Assessment focus: Solve problems involving addition.	270

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer		
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q10 Mr Chan has 386 table tennis balls. Each container can store 8 balls. To store all the balls, Mr Chan needs at least O A. 48 containers. O B. 49 containers. O C. 378 containers. O D. 3 088 containers. Assessment focus: Solve problems involving 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.	3M4-Q11 There are 6 pieces of chocolate cookie in a box. Mother buys 2 boxes of chocolate cookie and 3 pieces of butter cookie. She buys pieces of cookie altogether. Assessment focus: Solve problems involving mixed operations of multiplication and addition.	15		
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 Sue has 318 stickers at first. After giving 264 stickers to her friends, she buys another 129 stickers. How many stickers does she have now? (Show your working) Assessment focus: Solve problems involving mixed operations of addition and subtraction.	318 – 264 + 129 = 183 She has 183 stickers now.		

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Four Arithmetic Operations	KS1-N2-4 Solve problems involving four arithmetic operations. Problems of calculation of money in both dollars and cents involve only addition and subtraction and do not involve performing mixed operations.	3M4-Q13 Sandy has 4 photo albums. Each album holds 230 photos. She has photos altogether. Assessment focus: Solve problems involving multiplication.	920
Fractions	KS1-N3-1 Demonstrate recognition of fractions as parts of one whole and the diagrams representing equivalent fractions.	3M4-Q14 Which figure below shows that $\frac{5}{6}$ of the whole is shaded? O A. O B. O C. O D. Assessment focus: Demonstrate recognition of fractions as parts of one whole.	A. B. C. Correct Answer D.
Fractions	KS1-N3-2 Demonstrate recognition of the relationship between fractions and the whole.	3M4-Q15 7/7 is * smaller than / equal to / larger than 7. (*Circle the answer) Assessment focus: Demonstrate recognition of the relationship between fractions and the whole.	Circle "smaller than"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Fractions	KS1-N3-5 Solve problems involving addition and subtraction of fractions with the same denominators that are illustrated by diagrams.	3M4-Q16 Mother buys a cake. Sean eats $\frac{1}{8}$ of the cake. Patrick eats $\frac{4}{8}$ of the cake. Yanny eats $\frac{2}{8}$ of the cake. How much of the cake do they eat altogether? Sean eats: Yanny eats: (Show your working) Assessment focus: Solve problems involving addition of fractions with the same denominators that are illustrated by diagrams.	$\frac{1}{8} + \frac{4}{8} + \frac{2}{8}$ $= \frac{7}{8}$ They eat $\frac{7}{8}$ of the cake altogether.

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer	
Money	KS1-M1-2 Read price tags.	3M4-Q17(a) \$ 17.90 (a) A box of pencil costs dollars and cents. Assessment focus: Read price tags.	17, 90 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) Kelvin pays Circle the change returned to Kelvin by the shopkeeper. (b) Circle the change returned to Kelvin by the shopkeeper. (c) Circle the change returned to Kelvin by the shopkeeper. (d) Circle the change returned to Kelvin by the shopkeeper. (d) Circle the change returned to Kelvin by the shopkeeper. (e) Circle the change returned to Kelvin by the shopkeeper. (e) Circle the change returned to Kelvin by the shopkeeper. (e) Circle the change returned to Kelvin by the shopkeeper.	Circle the amount of "\$2.10"	

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).	Study the following diagram and answer the questions below. 4 km Hotel 2 km Sports Centre 3 km Shopping Mall Swimming Pool Science Centre (a) It is only 6 km from Shopping Mall to Cinema passing through Assessment focus: Compare the distances between objects in 'kilometre' (km).	Hotel
Length and Distance	KS1-M2-4 Compare the lengths of objects and compare the distances between objects in "kilometre" (km).	3M4-Q18(b) (b) The shortest route from Sports Centre to Shopping Mall is km. Assessment focus: Compare the distances between objects in 'kilometre' (km).	5

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Weight	KS1-M4-4 Measure the weights of objects with appropriate tools.	Which of the following is most suitable for measuring the weight of a pair of sports shoes? A. OB. Assessment focus: Measure the weights of objects with appropriate tools.	A. B. C. D. Correct Answer
Capacity	KS1-M5-5 Record the capacities of containers in an appropriate single unit.	Fill in the following blank with a suitable unit. The capacity of a kettle is about 4 Assessment focus: Record the capacities of containers in an appropriate unit.	litres / L

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
Time	KS1-M3-2 Tell time from an analog clock and a digital clock.	Johnny visits his grandfather's home. The two clocks below show the arriving time and the leaving time. Arriving Time Leaving Time (a) Johnny arrives at minute(s) past in the * morning / afternoon . (*Circle the answer) Assessment focus: Tell time from a digital clock.	10, 1, circle "afternoon" respectively
Time	KS1-M3-3 Record the duration of time for different activities in "hours", "minutes" or "seconds"(not involving changing units).	3M4-Q21(b) (b) Johnny stays at his grandfather's home for hour(s). Assessment focus: Record the duration of time for different activities in 'hours'.	3

Learning Unit	Basic Competency Descriptor	Item Number							Option / Answer
Time	KS1-M3-1 Demonstrate recognition of the dates and days of a week.	Answe calenda Sunday 6 13 20 27 (a) Th	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					Tuesday	
Time	KS1-M3-1 Demonstrate recognition of the dates and days of a week.	3M4-Q22(b) (b) Carnival starts on the 19th of July. It lasts for five days. The last day is the of (month) Assessment focus: Demonstrate recognition of the dates.					23 rd , July respectively		

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer		
Time	KS1-M3-4 Apply the "24-hour time", involving the interconversion with the "12-hour time".	The timetable of the float parade in the theme park is shown below. Starting time The first show 09:20 The second show 11:10 The third show 14:20 The fourth show 17:10 The third show starts at minute(s) past in the * morning / afternoon . (*Circle the answer) Assessment focus: Apply the '24-hour time'.	20, 2, circle "afternoon" respectively		
Capacity	KS1-M5-2 Compare the capacities of containers in improvised units.	of water can fill up Assessment focus: Measure and compare the capacities of containers in improvised units.	4		

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	The 3-D shape above is a O A. pyramid. O B. cylinder. O C. prism. O D. triangle. Assessment focus: Identify prism.	A. B. C. Correct Answer 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).	Peter cuts the rectangle above along the dotted line. He gets one triangle and one * rectangle / trapezium / pentagon . (*Circle the answer) Assessment focus: Identify trapeziums.	Circle "trapezium"

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
3-D	KS1-S1-1	3M4-Q27(a)	C, E
Shapes	Identify prisms, pyramids, cylinders, cones and spheres intuitively.	Study the 3-D shapes below. Write down all the letters for the answers. A. B. C. D. E. List: (a) Cylinder(s): Assessment focus: Identify cylinders.	
2 D	VC1 C1 1		D
3-D Shapes	KS1-S1-1 Identify prisms, pyramids, cylinders, cones and spheres intuitively.	3M4-Q27(b) (b) Sphere(s): Assessment focus: Identify spheres.	D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M4-Q28(a) Study the 2-D shapes below. Write down all the letters for the answers. A B List: (a) Hexagon(s): Assessment focus: Identify hexagons.	A
2-D Shapes	KS1-S2-1 Identify 2-D shapes intuitively, including triangles, quadrilaterals, trapeziums, parallelograms, pentagons, hexagons, squares, rectangles and circles (not involving the inclusion relations between different types of triangles and the inclusion relations between different types of quadrilaterals).	3M4-Q28(b) (b) Parallelogram(s): Assessment focus: Identify parallelograms.	D

Learning Unit	Basic Competency Descriptor	Item Number	Option / Answer			
2-D Shapes	KS1-S2-2 Identify different types of triangles intuitively, including right-angled triangles, isosceles triangles, isosceles right-angled triangles and equilateral triangles (not involving the inclusion relations between different types of triangles).	3M4-Q29 Which of the following 2-D shapes is an isosceles right-angled triangle? O A. O B. Assessment focus: Identify isosceles right-angled triangles.	A. Correct Answer B. C. D.			
Lines	KS1-S3-1 Identify straight lines and curves intuitively; and identify parallel lines and perpendicular lines.	3M4-Q30 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
Directions and Positions	KS1-S5-2 Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	The location map of a training camp is shown below. Car Park Car Park Stage Bus Stop (a) Starting from Computer Room, Aden goes south to reach * Car Park / Bus Stop / Canteen (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "Bus Stop"
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) Stage is to the * east / south / west / north of Bus Stop. (*Circle the answer) Assessment focus: Demonstrate recognition of the four directions: east, south, west and north, involving reading the compass.	Circle "west"

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.	The snack shop sells four kinds of snacks. A shopkeeper did a survey of the number of snacks sold yesterday. Number of Snacks Sold Yesterday Hot Dog Sausage Cookie Chicken Wing 0 5 10 15 20 25 30 35 40 Number of sets (a) The snack sold the most was There were sets. Assessment focus: Interpret bar charts with a one-to-five representation.	sausage, 35 respectively
Bar Charts	KS1-D2-1 Interpret bar charts with a one-to-one, one-to-two or one-to-five representation.	3M4-Q32(b) (b) The total number of snacks sold yesterday was sets. Assessment focus: Interpret bar charts with a one-to-five representation.	90

Learning Unit	Basic Competency Descriptor		Ite	Option / Answer			
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	3M4-Q33(1 Mr Wong did library. Type of books Number of books According to pictogram an Assessme Give a title	Science 6 the results d give it a t	The number of new books in the library			
Pictograms	KS1-D1-2 Construct pictograms using a one-to-one representation.	Assessme Construct prepresentati	Art nt focus ictograms	S:)))) Tr	for 1 book	From left to right: Science, Language

Learning Unit	Basic Competency Descriptor		Item 1		Option / Answer		
Pictograms	KS1-D1-2 Construct pictograms	3M4-Q33(3)					Art: 4 pictures Travel: 2 pictures
	using a one-to-one representation.	Assessment Construct pictorepresentation.	Art focus:	0 0 0 0	Travel		