# CURRICULUM DEVELOPMENT UNIT MATHEMATICS

New Edition 2010

Annual Teaching Guide

(ATG)

Japan Overseas Cooperation Volunteers (J.O.C.V.) JOCV Mathematics Specialist

## About Annual Teaching Guide (ATG)

#### Preface

The Annual Teaching Guide (ATG) describes the syllabus in detail and provides better guidelines for teachers, to produce satisfactory results in both teaching and learning and to accelerate the progress of math education in St.Vincent and the Grenadines. It tells the teacher when to teach a concept and for how long.

#### Special features

- ATG covers the syllabus completely, enables teachers to master the content of the syllabus for 1 year with consideration for systematic study, logical presentation of the subject and students' stage of development. The content of ATG consists of some Major Topics and Sub Topics.
- ATG is organized to allow students to interact with the five strands of the Curriculum (Number Concepts, Computation, Statistics, Geometry and Measurement) each term.
- ATG assumes the following model as the standard.

 $\triangleright$  Model Lesson Schedule per week

Grades	К	1	2	3	4	5	6
	6	6	6	7	7	7	7
Number of Lessons	1 Double & 4 Singles			2 Doubles & 3 Singles			
Lesson time (minutes)	20	25	30	30	30	35	40
Total Time (minutes)	120	150	180	210	210	245	280

Therefore, the total number of lessons is as follow.

[Kindergarten to Grade 2]

The First Term (Term 1)	13  weeks x  6  lessons = 78  lessons
The Second Term (Term 2)	10  weeks x  6  lessons = 60  lessons
The Third Term (Term 3)	10 weeks x 6 lessons = 60 lessons
Total	33  weeks x  6  lessons = 198  lessons

[Grade 3 to Grade 6]

The First Term (Term 1)	13 weeks x 7 lessons $= 91$ lessons
The Second Term (Term 2)	10  weeks x  7  lessons = 70  lessons
The Third Term (Term 3)	10  weeks x  7  lessons = 70  lessons
Total	33  weeks x  7  lessons = 231  lessons

A total of two weeks has been allocated from each term for examinations and extra curricula activities.

- The number of lessons for each Sub Topic was allotted as tentative plan in order to complete instruction on that topic. However the pace at which teachers cover every topic and number of lessons taught should depend on students' performance.

Takuya Kitamura

JOCV Mathematics Specialist (Math Officer) Japanese Overseas Cooperation Volunteer

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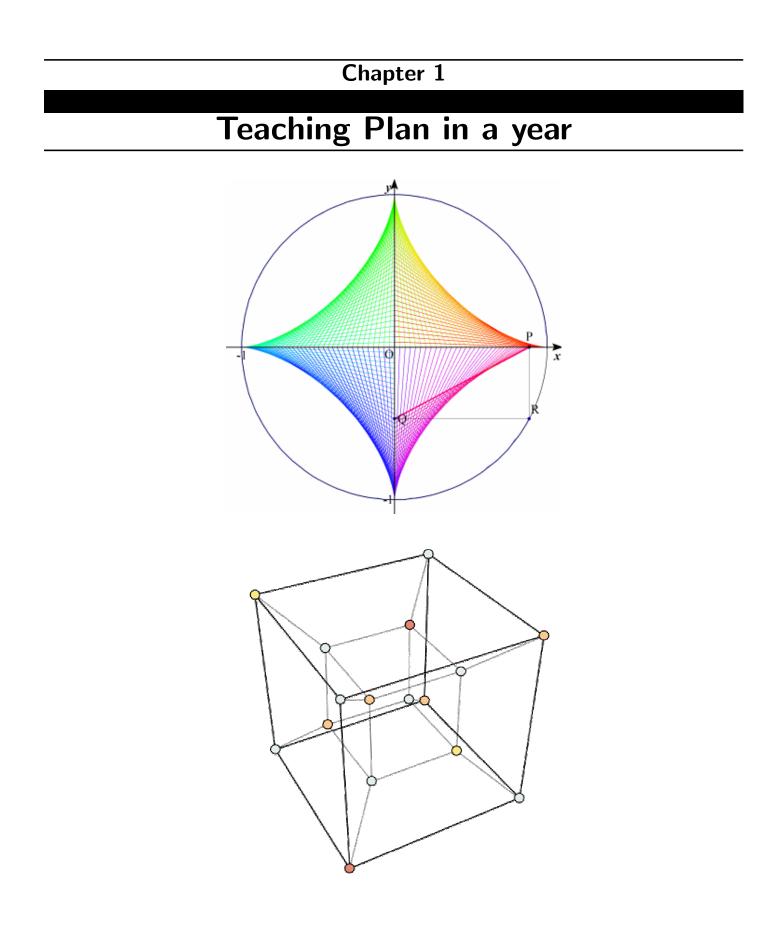
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## Section 1.1 Kindergarten to Grade 2 — Term 1

Month	Week	Lessons	Kindergaten	Grade 1	Grade 2
September	1 2	1 2 3 4 5 6 7 8 9 10 11 12	<number concepts=""> General/Readiness (3) Counting (9) 12 lessons</number>	<number concepts=""> Counting 12 lessons</number>	<number concepts=""> General (3) Counting (7) Whole Numbers (7)</number>
Sep	3	13 14 15 16 17 18 19 20 21	<computation> Addtion</computation>	<computation></computation>	17 lessons
	4 5	22 23 24 25 26 27 28 29 30	18 lessons	General (7) Addition of whole numbers (14) 21 lessons	<computation> General (4) Addition of whole numbers (12) 16 lessons</computation>
October	6 7	31 32 33 34 35 36 37 38 39 40 41 41 42 43 44	<statistics> General/Readiness (4) Data Collection (11) 15 lessons</statistics>	<statistics> Data Collection 12 lessons</statistics>	<statistics> Data Collection 12 lessons</statistics>
November	8 9 10	$\begin{array}{r} 45\\ 46\\ 47\\ 48\\ 49\\ 50\\ 51\\ 52\\ 53\\ 54\\ 55\\ 56\\ 57\\ 58\\ 59\\ 59\\ 59\\ 59\\ 59\\ 59\\ 59\\ 59\\ 59\\ 59$	<geometry> General/Readiness (4) Three−Dimensional Shapes (11) 15 lessons</geometry>	<geometry> Three−Dimensional Shapes 15 lessons</geometry>	<geometry> Three-Dimensional Shapes 12 lessons</geometry>
December No	11 12 13	60           61           62           63           64           65           66           67           68           69           70           71           72           73           74           75           76           77	<measurement> Linear Measurement (14) Mass (4) 18 lessons</measurement>	<measurement> Linear Measurement (12) Mass (6) 18 lessons</measurement>	<measurement> Linear Measurement (5) Mass (5) Capacity (4) Temperature (4) General Strategies (3) 21 lessons</measurement>

## Section 1.2 Kindergarten to Grade 2 — Term 2

Month	Week	Lessons	Kindergaten	Grade 1	Grade 2
January	1	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ \end{array} $	<number concepts=""> Whole Numbers 12 lessons</number>	<number concepts=""> Whole Numbers 15 lessons</number>	≺Number Concepts> Whole Numbers 6 lessons
Jan	3	13 14 15 16 17 18 19 20 21 22 23	<computation> Subtraction 15 lessons</computation>	<computation> Subtraction of whole numbers 12 lessons</computation>	<computation> Subtraction of whole numbers (10) Multiplication of whole numbers (11) 21 lessons</computation>
Feburary	5	24 25 26 27 28 29 30 31 32 33 34 35	<statistics> Data Representation 9 lessons</statistics>	<statistics> Data Representation 12 lessons</statistics>	<statistics> Data Representation 10 lessons</statistics>
	7	36 37 38 39 40 41 42 43 43 44 45 46 47 48	<geometry> Plane Shapes 12 lessons</geometry>	<geometry> Plane Shapes 12 lessons</geometry>	≺Geometry> Plane Shapes 11 lessons
March	9 10	48 49 50 51 52 53 54 55 56 57 58 59 60	<measurement> Capacity (4) Use of non-standard units (8) 12 lessons</measurement>	<measurement> Capacity (6) Temperature (3) 9 lessons</measurement>	<measurement> Time 12 lessons</measurement>

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## Section 1.3 Kindergarten to Grade 2 — Term 3

Month	Week	Lessons	Kindergaten	Grade 1	Grade 2
April	1	1 2 3 4 5 6 7 8	<number concepts=""> Whole Numbers (12) Introduction to the Calculator (3)</number>	<number concepts=""> Fractions 9 lessons</number>	<number concepts=""> Fractions</number>
	2	9 10 11 12 13 14 15	15 lessons	<computation> Multiplication of whole numbers</computation>	15 lessons
	4	16 17 18 19 20 21 21 22 23	<computation> Use of the Calculator 3 lessons <statistics> Data Interpretation</statistics></computation>	12 lessons	<computation> Division of whole numbers (7) Addition of factions (5)</computation>
Мау	5	24 25 26 27 28 29 30	9 lessons	≺Statistics> Data Interpretation 9 lessons	12 lessons <statistics></statistics>
	6	31 32 33 34 35 36 37	<geometry> Plane Shapes 12 lessons</geometry>	≺Geometry≻ Plane Shapes 9 lessons	Data Interpretation 9 lessons
	7	38 39 40 41 42 43 44			<geometry> Plane Shapes 11 lessons</geometry>
June	8	44 45 46 47 48 49 50 51	<measurement> Time (14) Money (7)</measurement>	<measurement> Time (12) Money (9)</measurement>	
ſ	9	52 53 54 55 56 57 58 59 60	21 lessons	21 lessons	<measurement> Money 13 lessons</measurement>

### Section 1.4 Grade 3 to Grade 6 — Term 1

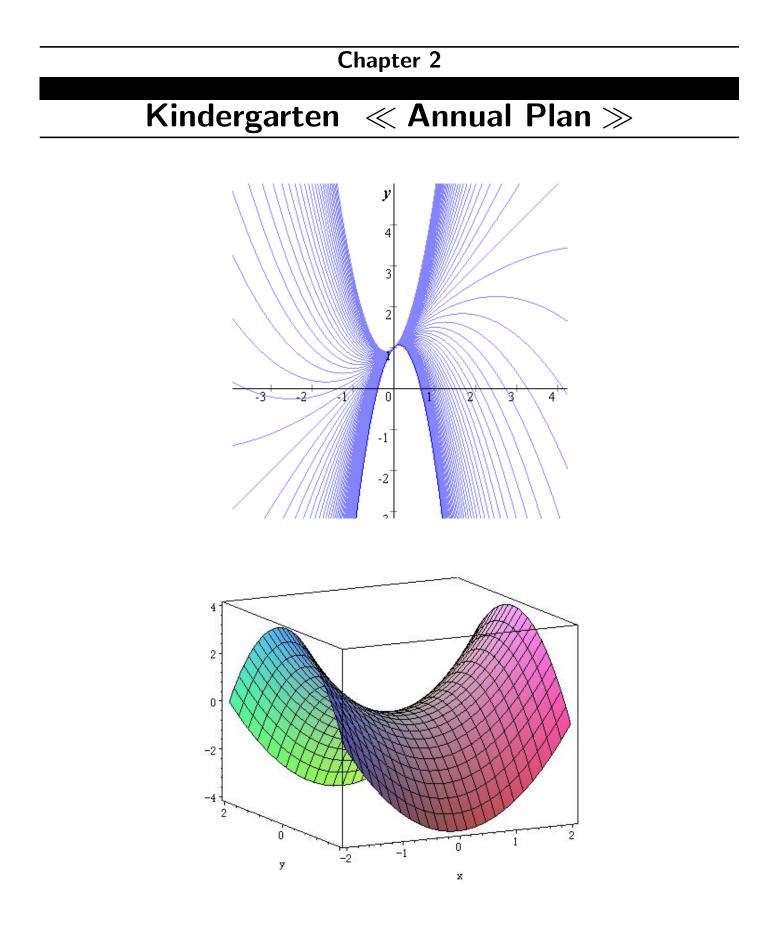
Month	Week	Lessons	Grade 3	Grade 4	Grade 5	Grade 6
September	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	<number concepts=""> General (2) Counting (4) Whole Numbers (15) 21 lessons</number>	<number concepts=""> General (3) Counting (4) Whole Numbers (14) 21 lessons</number>	<number concepts=""> Counting (3) Whole Numbers (18) 21 lessons</number>	<number concepts=""> General (3) Counting (3) Whole Numbers (17) 23 lessons</number>
October	4 5 6	22 23 24 25 26 27 27 28 29 30 31 31 32 33 34 35 36 37 37 38 39 40 41	<computation> General (6) Whole Numbers (15) 21 lessons</computation>	<computation> General (7) Whole Numbers (11) 18 lessons</computation>	<computation> General (7) Whole Numbers (14) 21 lessons</computation>	<computation> General (6) Whole Numbers (13) 19 lessons</computation>
	7 8	42 43 44 45 46 47 48 49 50 51 51 52 53 54	<statistics> General (2) Data Collection (8) Data Representation (7)</statistics>	<statistics> General (3) Data Collection (11) 14 lessons</statistics>	<statistics> General (3) Data Collection (11) 14 lessons</statistics>	<statistics> General (2) Data Collection (8) 10 lessons</statistics>
November	9 10	55 56 57 58 59 60 61 62 63 63 64 65 66 66 67 68 69 70	17 lessons <geometry> Three-Dimensional Shapes 14 lessons</geometry>	<geometry> Three−Dimensional Shapes (8) Plane Shapes (6) 14 lessons</geometry>	<geometry> Three−Dimensional Shapes 14 lessons</geometry>	<geometry> Three−Dimensional Shapes 14 lessons</geometry>
December	11 12 13	71 71 72 73 74 75 76 77 78 80 81 82 83 84 84 85 86 85 86 87 88 89 90 91	<measurement> General (5) Linear Measurement (7) Mass (6) 18 lessons</measurement>	<measurement> General (3) Linear Measurement (13) Mass (8) 24 lessons</measurement>	<measurement> General (4) Linear Measurement (7) Mass (4) Capacity (4) Temperature (2) 21 lessons</measurement>	<measurement> General (5) Linear Measurement (6) Mass (5) Capacity (3) Imperial Unit (3) Temperature (3) 25 lessons</measurement>

### Section 1.5 Grade 3 to Grade 6 — Term 2

Month	Week	Lessons	Grade 3	Grade 4	Grade 5	Grade 6
	1	1 2 3 4 5 6 7	<number concepts=""> Whole Numbers 10 lessons</number>	<number concepts=""> Whole Numbers</number>	<number concepts=""></number>	<number concepts=""></number>
January	2	8 9 10 11 12 13 14 15		11 lessons	Fractions (8) Decimals (10) 18 lessons	Fractions (9) Decimals (9) 18 lessons
	3	16 17 18 19 20 21 21 22 23	<computation> Whole Numbers 18 lessons</computation>	<computation> Whole Numbers</computation>		
	4	24 25 26 27 28 29 30	· · · · · · · · · · · · · · · · · · · ·	21 lessons	<computation> Fractions 14 lessons</computation>	<computation> Fractions (12) Decimals (9)</computation>
rary	5	31 32 33 34 35 36 37 38	<statistics> Data Representation 12 lessons</statistics>	<statistics> Data Representation</statistics>	<statistics> Data Representation</statistics>	21 lessons
Feburary	6	39 40 41 42 43 44		10 lessons	10 lessons	<statistics> Data Representation</statistics>
	7	45 46 47 48 49 50 51	≺Geometry> Plane Shapes 16 lessons	≺Geometry≻ Plane Shapes 10 lessons	≺Geometry≻ Plane Shapes 13 lessons	7 lessons <geometry> Plane Shapes</geometry>
	8	52 53 54 55 56 57				10 lessons
March	9	58 59 60 61 62 63 64 65 66 66	<measurement> Capacity (5) Temperature (5) Perimeter (4)</measurement>	<measurement> Capacity (8) Temperature (5) Perimeter and Area (5) 18 lessons</measurement>	<measurement> Relationships among Metric Units (4) Imperial Units (3) Perimeter and Area (8)</measurement>	≺Measurement> Time (6) Perimeter and Area (8) 14 lessons
	10	67 68 69 70	14 lessons		15 lessons	

#### Section 1.6 Grade 3 to Grade 6 — Term 3

Month	Week	Lessons	Grade 3	Grade 4	Grade 5	Grade 6
April	1	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ \end{array} $	<number concepts=""> Fractions 14 lessons</number>	<number concepts=""> Fractions 14 lessons</number>	<number concepts=""> Percents (13) Roman Numerals (4) 17 lessons</number>	<number concepts=""> Percents (6) Ratio (7) Roman Numerals (4) 17 lessons</number>
	$ \begin{array}{r} 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ 21 \\ 22 \\ 23 \\ 24 \\ 24 \\ 25 \\ 26 \\ 27 \\ 28 \\ \end{array} $		<computation> Fractions 14 lessons</computation>	<computation> Fractions 17 lessons</computation>	<computation> Decimals (9) Percents (9) 18 lessons</computation>	<computation> Percents (10) Ratio (4) 14 lessons</computation>
May	5	29 30 31 32 33 34 35 36 37 38 39 40 41 42	<statistics> Data Interpretation 7 lessons <geometry> Plane Shapes 10 lessons</geometry></statistics>	<statistics> Data Interpretation 7 lessons</statistics>	<statistics> Data Interpretation 7 lessons</statistics>	<statistics> Data Interpretation 13 lessons</statistics>
	7	43 44 45 46 47 48 49 50 51 51 52 53 54 55	Measurement>	<geometry> Plane Shapes 14 lesons</geometry>	≺Geometry> Plane Shapes 14 lesons	≺Geometry> Plane Shapes 12 lesons
June	9 10	56           57           58           59           60           61           62           63           64           65           66           67           68           69           70	Time (13) Money (12) 25 lessons	<measurement> Time (9) Money (9) 18 lessons</measurement>	<measurement> Time (4) Money (10) 14 lessons</measurement>	<measurement> Money (10) Angles (4) 14 lessons</measurement>



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## Section 2.1

Kindergarten — Term 1

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	General/ Readiness			3	
ept			2. Describe a set of objects using phrases such as 'large', 'small', 'many', 'few', etc.		
Number Concept			3. Count in sequence up to 50.		2.0 wk
Num	Counting		4. Count backwards from 10.	9	
			5. Count the number of objects in a set up to 12 objects.		
			6. Solve problems related to counting operations.		
		Vocabulary	1. Combine two sets of objects, and count the number of objects in the resulting set, with totals up to 9.	4	
			2. Describe the set obtained from combining two sets of objects using phrases such as 'larger', 'has more than', etc.		
ion		dition 4. Use	3. Use objects to add two numbers, with totals up to 9.		
Computation	Addition		4. Use pictorial representations to add two numbers, with total up to 9.		3.0 wk
		Representation of addition	5. Write number sentences to represent addition.	14	
			<ol> <li>Identify situations in their everyday activities (e.g., games) where they use addition.</li> </ol>		
			7. Create and solve problems involving addition.		

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Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	General/ Readiness		1. Classify objects according to selected attributes, e.g., size, colour, shape, texture, sound etc.	4	
Statistics		Collecting data through looking	<ol><li>Collect simple sets of data in the classroom and school environment, using observation.</li></ol>		2.5
Stat	Data Collection	Determining	<ol> <li>Describe the result of classification and data collection activities.</li> </ol>	11	wk
		frequency	4. Use counting to determine the number of objects in a group.		
	General/ Readiness		1. Describe the attributes of objects using phrases such as 'round', 'straight', 'flat', 'curved', etc.	4	
etry			2. Describe the attributes of three-dimensional shapes using phrases such as 'roll', 'slide', 'stack up', 'flat', 'round', 'curved', etc.		0.5
Geometry	Three- Dimensional Shapes		<ol> <li>Classify three-dimensional shapes on the basis of their attributes, e.g. shape, size, and function in real life.</li> </ol>	11	2.5 wk
		Shapes	4. Identify examples of three-dimensional shapes in real life.		
		5. Use three-dimensional shapes to make objects, e.g., a rocket, a house.			
			1. Describe the length of objects using phrases such as 'short', 'long', 'wide', etc.		
			<ol> <li>Compare lengths of objects using phrases such as 'longer than', 'shorter than', 'wider than', etc.</li> </ol>		
	Linear	Vocabulary for	<ol> <li>Describe heights of objects using phrases such as 'tall', 'short'.</li> </ol>		
Measurement	Measurement	Measurement distance 4. Compare the height	4. Compare the heights of objects using phrases such as 'taller than', 'shorter than', etc.	14	3.0
Measu			5. Describe distances using phrases such as 'short', 'long', 'far away', 'nearby', etc.		wk
			6. Compare distances using phrases such as 'shorter', 'longer', 'closer', 'further', etc		
			7. Describe the mass of objects as heavy, light, very light, etc.		
	Mass	Mass 8. Compare the mass of objects, using phrases such as 'heavier than', 'lighter than', 'as heavy as', etc.		4	

## Section 2.2

Kindergarten 

-	Term	2	
_		2	

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			7. Read and identify the numbers 0 to 12.		
		Representation of numbers	<ol> <li>Write the correct numeral to indicate the number of objects in a set.</li> </ol>		
			9. Write numbers from zero to twelve in words.		
0			10. Make sets of up to 12 objects.		
Number Concepts	Whole		11. Identify sets that are equal in number but arranged differently.	12	2.0
Number	Numbers	Making and	12. Draw a variety of arrangements to represent a set of a given size.		wk
		comparing sets	13. Make a set that has the same number of objects as a given set.		
			14. Make a set that has one more object than a given set.		
			15. Compare the number of objects in two sets, using 1-1 correspondence.		
		Vocabulary	<ol> <li>Separate a set of objects by taking away a given quantity of objects.</li> </ol>		
			9. Describe the resulting set obtained after the separation of a set , using phrases such as 'has less than'.		
ation			10. Use objects to subtract one number from another, with both numbers being less than or equal to 9.		0.5
Computat	Subtraction		11. Use pictorial representations to subtract one number from another, with both numbers being less than or equal to 9.	15	2.5 wk
		Representation of subtraction	12. Write number sentences to represent subtraction.		
			13. Identify situations in their everyday activities (e.g., sharing sweets) where they use subtraction.		
			14. Create and solve simple problems involving subtraction.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
Statistics	Data	Recording data using words and	5. Use simple statements to record and represent data, e.g., 'John has four marbles'.	9	1.5
Stat	Representation	objects	6. Represent data graphically using objects, e.g. picture cutouts, blocks.	-	wk
			6. Describe the attributes of two-dimensional shapes.		
Geometry	Plane Shapes	Two-dimensional	7. Classify two-dimensional shapes on the basis of their attributes, e.g., shape and size.	12	2.0
Geor	Tiane Shapes	shapes	8. Identify objects in real life that are made up of two dimensional shapes.	12	wk
		9. Use cutouts of two-dimensional shapes to make patterns and pictures.			
	Capacity		9. Describe the capacity of containers using phrases such as 'holds a lot', 'holds a little', etc.	4	
t	Gapacity		10. Compare the capacity of containers using phrases such as ' holds more than', 'holds the same as', etc.	4	
Measurement		Estimation 11. Estimate the length, mass, and capacity of object non-standard units.			2.0 wk
N	Use of non- standard units		12. Measure the length, mass and capacity of objects using non-standard units.	8	
		Measurement	13. Solve problems involving the estimation and measurement of length, mass, and capacity using non-standard units.		

## Section 2.3

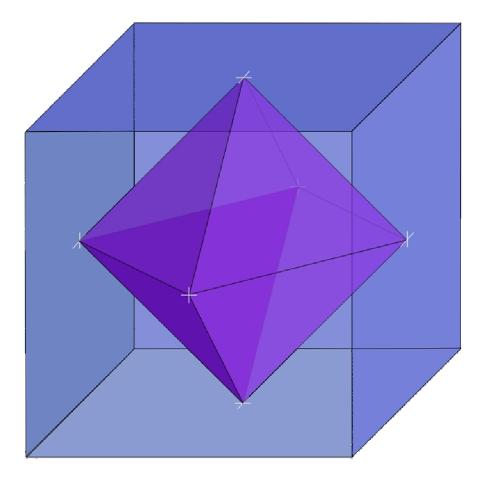
Kindergarten — Term 3

Stra nds	Topics	Sub Topics	Learning Outcomes	Less	sons	
			Comparing sets	16. Compare the number of objects in sets of up to 12 objects using phrases such as 'same number as', 'equal to', 'more than', 'less than', 'one more than', etc.		
incepts	Whole Numbers		17. Compare the number of objects in two sets with up to 12 objects using the symbols '=' and '>'.	12	0.5	
Number Concepts		Ordinal numbers	18. Identify the position of an object in an ordinal arrangement of up to 5 objects.		2.5 wk	
	Introduction to the Calculator		19. Describe physical features of a simple calculator e.g. the keys, the display area.	3		
			20. Use calculators to investigate counting operations.			
Computation	Use of the	Use of the	15. Identify the keys for addition and subtraction on their calculators.	3	0.5	
Compu	Calculator		16. Explain how to use the calculator to add or subtract two numbers.	3	wk	
Statistics	Data Interpretation	Use of comparative terms related to quantity	7. Compare data using phrases such as 'more than' 'less than' 'one more than', 'the same as', 'the most' etc.	9	1.5 wk	

Stra nds	Topics	Sub Topics	Learning Outcomes	Less	sons
			10. Trace two-dimensional shapes.		
Geometry	Plane Shapes	Spatial relationships	11. Identify rectangles and circles by names.	12	2.0 wk
Ū			12. Describe the relative position of objects using relationships such as 'above', 'below', 'in', 'on', ' outside', 'inside', etc.		
		Vocabulary	14. Use time vocabulary appropriately; e.g., today, yesterday, tomorrow, morning, afternoon, etc.		
			15. Name the days of the week.		
		Days of the week	16. Identify the current day, 'Today is'.		
		Time Months of the year	17. Identify the day corresponding to tomorrow or yesterday given the current day.		
	Time		18. Identify the current month.	14	
ent			19. State the month in which they were born.		
Measurement			20. Tell time on the hour.		3.5 wk
Me			21. Represent time on the hour on an actual or model clock.		
		Time on the hour	22. Represent the time for events that occur on the hour, using an actual or model clock.		
		Features of coins	23. Describe the 1 cent, 2 cent, 5 cent coins.		
		reatures of coins	24. Identify the 1 cent, 2 cent, and 5 cent coins.		
	Money	Money 25. Representation of and	25. Represent 2 cents and 5 cents in different ways using coins and drawings.		
		amounts of money	26. Find the total value of a set of coins up to a total of 5 cents.		

## Chapter 3

# Grade 1 $\ll$ Annual Plan $\gg$



## Section 3.1 Grade 1 — Term 1

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
pts			1. Use calculators to count in a variety of ways.		
			2. Count in sequence to 100.		
Conce	Counting	Counting forward, backward,	3. Count by 10's to 100.	12	2.0
Number Concepts	Counting	counting on, skip counting	4. Count by 2's and 5's to 50.	12	wk
Nur			5. Count backwards from 10.		
			6. Count on from a given number.		
		Vocabulary	1. Describe the procedures for carrying out addition, subtraction, and multiplication, using appropriate vocabulary such as 'total', 'sum', 'join together', 'subtract', 'take away', 'sets of', 'times', etc.		
	General	Relationships	2. Use several devices (e.g., concrete and pictorial representation, a calculator) to explore the properties of addition and subtraction, e.g., if $5 + 2 = 7$ then $2 + 5 = 7$ ; $7 - 0 = 7$ .	7	
		among operations	3. Use several devices to demonstrate relationships among the number facts for addition and subtraction, e.g., if $5 + 4 = 9$ then $9 - 5 = 4$ .		
Computation		Basic facts	<ol> <li>Use several devices and strategies (e.g., properties of addition and subtraction) to build up the basic number facts for addition and subtraction.</li> </ol>		3.5
Compi			5. Create and solve problems involving addition of one digit numbers, with totals up to 20.		wk
			<ol><li>Add two one-digit numbers, using objects and pictures/diagrams.</li></ol>		
	Addition of whole numbers	Concrete pictorial and symbolic representation	7. Add three one-digit numbers, using objects and pictures/diagrams, with totals up to 20.	14	
		representation	8. Mentally add two one-digit numbers, with totals up to 10.		
			9. Write number sentences to represent addition.		
			10. Use objects to determine the missing number in an addition number sentence, e.g., $7+8=4+\Box$ , $12=\Box$ .		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Collecting data through looking	1. Classify objects and people (e.g., classmates) according to selected criteria.		
Statistics	Data Collection	and asking	2. Collect simple sets of data in the class and school environment through observation and simple interviews.	12	2.0 wk
		Recording data using numbers and words	3. Record collected data using simple number statements.		
			1. Describe the attributes of three-dimensional shapes, using phrases such as flat, curved, round, etc.		
			2. Classify three-dimensional shapes on the basis of their attributes such as shape, size and/or function.		
			3. Select and use their own criteria to classify three-dimensional shapes.		
Geometry	Three- Dimensional Shapes	Classification Attributes/ Features	4. Explain the criteria that they selected and used to classify a set of three-dimensional shapes.	15	2.5 wk
			5. Explain why a given three-dimensional shape can slide, roll, or stack.		
			6. Classify objects (e.g., lead pencils, sticks of chalk, balls, etc.)		
			7. Use three-dimensional shapes to make objects, e.g., a tower, a car.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			<ol> <li>Estimate lengths and heights of objects using non-standard units.</li> </ol>	-	
		Use of non- standard units	<ol> <li>Measure lengths and heights of objects using non-standard units.</li> </ol>		
			<ol> <li>Estimate and measure distances in the school environment using non-standard units.</li> </ol>		
	Linear		4. Explain why standard units are necessary.	10	
	Measurement	Ę	<ol> <li>Estimate and measure lengths and heights of objects using the metre as the unit of measure.</li> </ol>	12	
Measurement		Use of the metre to measure length, height and distances	<ol><li>Estimate and measure distances in the school environment using the metre as the unit of measure.</li></ol>		3.0 wk
Meas		7. Record linear measurements using appropriate notation.		WIX	
			8. Compare two linear measurements using phrases such as longer than, shorter than, taller than, etc.		
		Use of non- standard units	<ol> <li>Estimate and measure the mass of objects using non- standard units.</li> </ol>	6	
	Mass	Use of kilogram	10. Estimate and measure the mass of objects using the kilogram as the unit of measure.		
			11. Record measurements of mass using appropriate notation.		
		Comparison of mass	12. Compare the mass of two objects, using phrases such as heavier than, lighter than, etc.		

### Section 3.2 Grade 1 — Term 2

Stra nds	Topics	Sub Topics	Learning Outcomes	Less	sons
Number Concepts	Whole Numbers	Making and comparing sets Representing numbers	<ul> <li>7. Write numbers up to twenty in words.</li> <li>8. Count and identify the number of objects in a set of up to 20 objects.</li> <li>9. Make and draw sets of up to 20 objects.</li> <li>10. Make and draw sets that is equal to, one more than, or one less than a given set.</li> <li>11. Compare sets of up to twenty objects using the symbols '=', '&lt;' or '&gt;'.</li> <li>12. Write the correct numeral to indicate the number of objects in a set.</li> <li>13. Read and write numerals up to 20.</li> </ul>	15	2.5 wk
		Ordinal numbers	<ul> <li>14. Compare pairs of numerals (up to 20) using the symbols '&lt;' or '&gt;'.</li> <li>15. Identify the position of an object in an ordinal arrangement of up to 10 objects.</li> <li>16. Use collective number names such as pair, set, group.</li> </ul>		
Computation	Subtraction of whole numbers	Concrete, pictorial, and symbolic representation	<ul> <li>11. Create and solve problems involving subtraction situations.</li> <li>12. Subtract a one-digit number from numbers up to 20, using objects and pictures/diagrams.</li> </ul>	12	2.0 wk
			13. Write number sentences to represent subtraction.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Less	sons	
		Recording data using objects and	4. Represents collected data using objects, e.g., picture cutouts and blocks.			
		tables	5. Describe how data are presented in simple tables.			
Statistics	Data Representation		<ol> <li>Describe how data are presented in simple pictographs, where one picture represents one unit of data.</li> </ol>	12	2.0 wk	
0,		Describing simple graphs	7. Describe how data are presented in simple bar graphs, where one block represents one unit of data.			
			8. Describe similarities and differences between pictographs and bar graphs.			
			8. Identify examples of two-dimensional shapes.			
			9. Classify two-dimensional shapes on the basis of their attributes, e.g., shape, size, number of sides.			
Geometry	Plane Shapes	shapes.	10. Select and use their own criteria to classify two-dimensional shapes.	12	2.0 wk	
Geo				11. Explain the criteria that they used to classify a set of two- dimensional shapes.		wĸ
		Naming shapes	12. Identify and name rectangles, squares, and circles.			
		Drawing shapes	13. Sketch two-dimensional shapes.			
			13. Estimate and measure the capacity of containers using non- standard units.			
Measurement	Capacity	Use of non- standard units	14. Compare the capacity of containers using non-standard units, using phrases such as holds more than, holds less than, etc.	6	1.5	
Meas			15. Record measurements of capacity using appropriate notation.		wk	
	Temperature		16. Describe the temperature of an object using phrases such as 'warm', 'hot', 'cold', etc.	3		

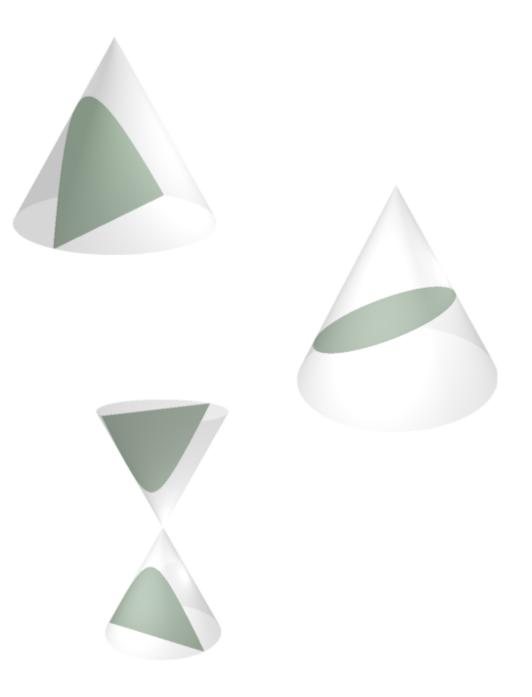
### Section 3.3 Grade 1 — Term 3

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Meaning of a whole and a part	17. Identify a whole and parts of a whole.		
ncepts			18. Identify one-half and one-quarter of a whole.		
Number Concepts	Fractions	One-half, one-	19. Explain what one-half and on-quarter mean.	9	1.5 wk
Nun		quarter of a whole	20. Represent one-half and one quarter of a whole.		
			21. Read and write the fractions ½ and ¼.		
			14. Use objects and pictures/diagrams to show repeated addition situations.		
			15. Describe repeated addition situations using 'sets of'.		
Computation	Multiplication of whole numbers		16. Write number sentences to represent repeated addition situations, e.g., $2 + 2 + 2 = 6$ , 3 sets of 2 make 6.	12	2.0 wk
Co			17. Complete multiplication number statements, with products up to 12.		
			18. Create and solve problems involving multiplication with products up to 12.		
			9. Read the data presented in simple tables.		
s			10. Interpret the data presented in tables.		
Statistics	Data Interpretation	Interpreting tables and graphs	11. Read the data represented in simple pictographs and bar graphs.	9	1.5 wk
			12. Interpret the data represented in simple pictographs and bar graphs.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Drawing shapes	14. Use two-dimensional shapes to draw patterns and pictures.		
Geometry	Plane Shapes		15. Make observations about their patterns and pictures. (E.g. some two-dimensional shapes make patterns that cover a page, others leave spaces.)	9	1.5
Geor	Trane Onapes	Spatial relationships	16. Identify the relative position of objects presented in concrete and pictorial form.	5	wk
			17. Position objects according to descriptions of their relative position.		
		Vocabulary	17. Use time vocabulary appropriately, e.g., now, later, soon, year, month, day, etc.		
			18. Name the days of the week.	12	
		Use of the	19. State the number of days in a week.		
	Time	calendar Time	20. Name the months of the year.		
			21. State and write the date of the current day.		
			22. Tell time on the hour and half-hour.		
rt		Time on the hour	23. Read and write time on the hour and half-hour in several ways (e.g., 8:00, eight o' clock).		
Measurement		and half-hour	24. Represent time on the hour and half-hour.		3.5
Measu			25. Represent and write the time for events that occur on the hour or half-hour, e.g., break time.		wk
			26. Describe the 1 cent, 2 cent, 5 cent, and 10 cent coins.		
		Describing coins	27. Identify the 1 cent, 2 cent, 5 cent, and 10 cent coins.		
		Representing	28. Represent a coin value (up to 20 cents) using several combinations of coins.		
	Money	money	29. Find the total value of a combination of coins, with totals up to 20 cents.	9	
		Making change	30. Make change from amounts up to 20 cents, using counting on.		
			31. Create and solve problems involving money.		

## Chapter 4

# Grade 2 $\ll$ Annual Plan $\gg$



## Section 4.1 Grade 2 — Term 1

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	General	Use of appropriate strategies for	1. Use a calculator, pencil and paper procedures, or mental strategies to investigate number concepts.	3	
		investigating number concepts	<ol> <li>Explain how they used selected strategy in carrying out investigations involving number concepts.</li> </ol>		
			3. Count in sequence to 100 and beyond.		
		Counting forward and back	4. Describe the patterns that are evident in numbers between 1 and 100 and numbers beyond 100.		
S		Counting on Skip counting	5. Count by 2's, 5's, 10's, 20's, and 25's to 100 and beyond.	7	
Number Concepts			6. Count on from a given number.		2.8 wk
Numbe		Number sequences	7. Complete a sequence of numbers that involves counting by 2's, 5's, 10's, 20's, and 25's.	7	
		Reading and	8. <mark>Read</mark> numbers up to 99.		
		writing numbers	9. Write numbers up to 99 in words and numerals.		
	Whole Numbers	Problem solving	10. Create and solve problems involving place value.	7	
		Discovering	11. State the place value of any digit in a two-digit number.		
		Place value	12. Represent a two-digit number in terms of a number of tens and ones using concrete objects and diagrams.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons	
	General	Use of	1. Identify and describe situations in which it is appropriate to use mental strategies, pencil and paper procedures, and a calculator to add subtract, multiply or divide whole numbers	4		
	General	computation strategies	2. Use mental strategies, pencil and paper procedures, or a calculator as appropriate to add, subtract, multiply and divide whole numbers.	4		
ion		Problem solving	3. Create and solve problems involving addition of whole numbers with total up to 99.			
Computation			4. Use several strategies to recall the basic facts for addition.		2.7 wk	
Com	Addition of	Basic facts	5. Explain their strategies for recalling the basic facts for addition.		WIX	
	whole numbers	Addition without and with	<ol><li>Add a two-digit number to a one-digit number, without and with regrouping, totals up to 99.</li></ol>	12		
				7. Add two two-digit numbers, without and with regrouping, totals up to 99.		
		Addition-related vocabulary	8. Carry out addition with numerals presented in a horizontal or vertical format.			
		Simple questions of interest to students	1. Generate questions that may be answered through data collection.			
tics				Procedures for observation and	2. Describe how to collect data through observation and simple interviews.	
Statistics	Data Collection		3. Identify similarities and differences between observation and interviewing.	12	wk	
		Collecting and	<ol> <li>Collect simple sets of data through observation and simple interviews.</li> </ol>			
		recording data	5. Use number statements to record the collected data.			
		Faces of three-	1. Identify the faces of three-dimensional shapes.			
		dimensional shapes	<ol><li>Identify the two-dimensional shapes that make up the faces of three-dimensional shapes.</li></ol>			
Geometry	Three- Dmensional	Classification	3. Classify three-dimensional shapes on the basis of their attributes, e.g., the number of faces, shape of their faces, size, function, etc.	12	2.0 wk	
Ge	Shapes		4. Describe and compare the groups formed from their classification exercises.			
			Cubes, cuboids, cones and cylinders	5. Identify and name examples of cubes, cuboids, cones, cylinders, and spheres when presented in concrete or pictorial form.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Estimation and measurement of length, height, and	1. Estimate and measure lengths and heights of objects using the metre as the unit of measure.		
	Linear Measurement	distances using the metre	2. Estimate and measure distances using the metre as the unit of measure.	5	
		Comparison of linear measurements	<ol> <li>Compare two or three linear measurements using phrases such as longer, longest, higher, highest, etc.</li> </ol>		
		Estimation and measurement of	<ol> <li>Estimate and measure the mass of objects using the kilogram as the unit of measure.</li> </ol>		
	Mass	mass using the kilogram	5. Describe situations in real life where the kilogram is used as a unit of measure and give reasons for these uses of the unit.	5	
ement		Comparison of mass	<ol><li>Compare the masses of two or three objects using phrases such as heavier, lighter, lightest, etc.</li></ol>		. 3.5
Measurement	Capacity	Estimation and measurement of capacity using the litre	7. Estimate and measure the capacity of containers using the litre as the unit of measure.	4	wk
		Comparison of capacity	<ol> <li>Compare the capacity of two or three containers using phrases such as 'holds more', 'holds the least', etc.</li> </ol>		
	Temperature	Temperature- related vocabulary	9. Describe the temperature of an object as warm, 'hot', 'cold', 'tepid', etc.	4	
	remperature	Comparison of temperature	10. Compare the temperature of two or three objects using phrases such as warmer, hotter, hottest, coldest, etc.	4	
	General	Selection of units	11. Select the appropriate unit to measure length, mass, and capacity.	3	
	Strategies	Problem solving	12. Create and solve problems involving linear measurement and measurement of mass, capacity, and temperature.	5	

### Section 4.2 Grade 2 — Term 2

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
S		Place value	13. State the total value of any digit in a two-digit number.		
ncept		Expanded notation	14. Write two-digit numbers in expanded form.		
Number Concepts	Whole Numbers	Comparison of	15. Compare pairs of two-digit numbers using the symbols '<' and '>'.	6	1.0 wk
NU		numbers	16. Arrange a set of two-digit numbers in order of magnitude and give reasons for the arrangement.		
		Problem solving	<ol><li>Create and solve problems involving subtraction of whole numbers with up to two digits.</li></ol>		
		Basic facts	10. Use several strategies to recall the basic facts for subtraction.	10	
		Dasic lacis	11. Explain their strategies for recalling the basic facts for subtraction.		
	Subtraction of whole numbers	Subtraction	12. Subtract a one-digit number from a two-digit number, without and with regrouping.		
		regrouping	13. Subtract a two-digit number from a two-digit number, without and with regrouping.		
utation			Subtraction-	14. Explain the procedures they use for addition and subtraction, using appropriate vocabulary such as 'add', 'sum', 'difference', 'minus', etc.	
Computation		related vocabulary	15. Carry out subtraction with numerals presented in a horizontal or vertical format.		wk
		Problem solving	16. Create and solve simple problems involving multiplication.		
		Multiplication- related vocabulary	17. Interpret multiplication statements and number sentences, using terms such as 'sets of', 'times', 'product', etc.		
		Multiplication of one-digit numbers	18. Calculate the product of two one-digit numbers, with products up to 60.	11	
	whole numbers	Properties of multiplication	19. Explain the properties of multiplication (e.g., any number times 1 equals the number, the product of two numbers is the same even if their order is changed, $3 \times 4 = 4 \times 3 = 12$ ).		
		Basic facts	20. Use several strategies (e.g., concrete objects, skip counting, properties of multiplication) to develop the multiplication basic facts for the 2, 3, 5, and 10 times table.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons	
			6. Describe how data are represented in a table.			
			7. Record collected data in tables.			
SC		Use of tables,	8. Describe how data are represented in pictographs and bar graphs.			
Statistics	Data Representation	pictographs, and	9. Explain the benefits of presenting data in tables and graphs.	10	1.7 wk	
St		bar graphs	10. Select appropriate means, pictograph or bar graph, to graphically represent collected data.			
			11. Represent recorded data by completing pictographs or bar graphs for which an outline or grid has been provided, and in which one picture or bar represents one unit of data.			
		Sides of two-	6. Identify the sides of a two-dimensional shape.			
		dimensional shapes	7. Describe two-dimensional shapes in terms of the number and length of their sides.			
etry	Plane Shapes c r t		Classification	<ol> <li>Classify two-dimensional shapes on the basis of their attributes, e.g., shape, size, number of sides.</li> </ol>		1.0
Geometry		rectangles, circles, triangles	9. Identify and name squares, rectangles, triangles, and circles.	11	1.8 wk	
			10. Sketch squares, rectangles, triangles, and circles.			
		Drawing shapes	Drawing shapes	11. Sketch two-dimensional shapes that are a composition of squares, rectangles, triangles, and/or circles.		
		Problem solving	13. Create and solve problems involving time.			
		Time-related vocabulary	14. Use time vocabulary appropriately, e.g., yesterday, today, tomorrow, next week, last week, as soon as, etc.			
			15. Name the days of the week and months of the year.			
		Use of the	16. State the number of days in a week and months in a year.			
Measurement	Time	calendar	17. State and write the date for the current day, and the date of important events, e.g., their birthday, Christmas Day, Independence Day.	12	2wk	
Me			18. Tell time on the hour, half hour, and quarter hour in a variety of ways.			
		Time on the hour, half-hour, and	19. Represent time on the hour, half hour, and quarter hour.			
		quarter hour	20. Use the abbreviation 'a.m.' and 'p.m.' correctly.			
			21. Tell and write the time at which certain events occur, e.g., break time, lunch time.			

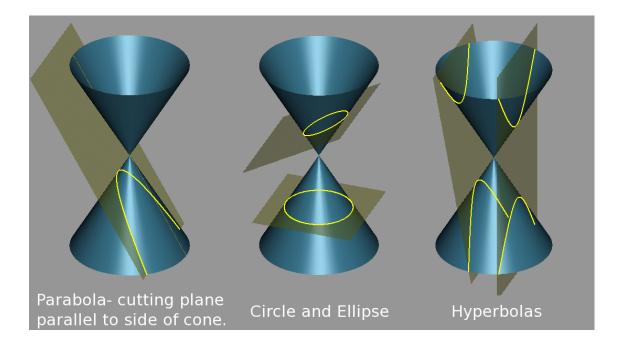
### Section 4.3 Grade 2 — Term 3

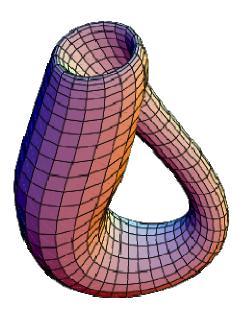
Stra nds	Topics	Sub Topics	Learning Outcomes	Lessons	
Number Concepts	Fractions	Problem solving	17. Create and solve problems involving fractions of a whole.	15	2.5 wk
		Unit fractions Comparison of fractions	18. Identify a unit fraction (1/2. 1/3, 1/4, 1/5, 1/8) of a whole.		
			19. Compare unit fractions.		
			20. Represent a unit fraction of a whole.		
			21. State and write, in words and numerals, the unit fraction that corresponds to a pictorial or concrete representation of a unit fraction of a whole.		
		Unit fractions	22. Identify a fraction of a whole (e.g., 2/3, 3/4, etc).		
		Proper fractions Representation of fractions	23. Represent a fraction of a whole, using concrete objects or diagrams.		
			24. State and write, in words and numerals, the proper fraction that corresponds to a pictorial or concrete representation of a fraction of a whole.		
			25. Describe real life situations that involve fractions of a whole.		
Computation	Division of whole numbers	Problem solving	21. Create and solve problems involving division.	7	2.0 wk
		Division as repeated subtraction	22. Illustrate division as repeated subtraction, in a variety of ways: using concrete objects, a number line, or numerals.		
		Division-related vocabulary	23. Use appropriate division vocabulary, e.g., number of groups, number of objects in each group, etc.		
			24. Write number sentences to represent division.		
	Addition of factions	Addition of unit fractions	25. Add two or more unit fractions with like denominator, and totals up to 1.		
		Problem solving	26. Create and solve problems involving addition of unit fractions.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Lessons	
Statistics	Data Interpretation	Reading tables and graphs	12. Read the data presented in simple tables, pictographs, and bar graphs.	9	1.5 wk
		Answering simple questions on the information in the graph	13. Interpret data in simple tables, pictographs, and bar graphs.		
Geometry	Plane Shapes	Drawing shapes Curves and straight lines	12. Sketch two-dimensional shapes according to given descriptions.	. 11	1.8 wk
			13. Copy drawings of curves and straight lines.		
			14. Draw curves and straight lines.		
			15. Sketch pictures to represent descriptions of the relative positions of two or more objects.		
		Spatial relationships	16. Describe the relative position of objects using phrases such as by, on, in, inside, outside, opposite, beside, etc.		
Measurement	Money	Problem solving	22. Create and solve problems involving money.	13	2.2 wk
		Description of the Eastern Caribbean currency	23. Describe the coins in circulation.		
			24. Represent amounts up to \$5.00 using coins in a variety of combinations.		
			25. Describe the \$5, \$10, and \$20 notes.		
		Representing amounts of money	26. Represent values up to \$20.00 using \$1 coins and notes in a variety of combinations.		
			27. Find the total value of a combination of notes and coins, up to a value of \$20.00.		
			28. Read prices of items.		
		Calculations involving money	29. Find the total cost of two or three items, up to a total of \$1.00.		
			30. Calculate change from \$1.00, using counting on.		

## Chapter 5

## Grade 3 « Annual Plan »





# Section 5.1 Grade 3 — Term 1

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	General	Use of appropriate strategies to investigate number concepts	1. Select an appropriate strategy (calculator, pencil and paper, or mental strategy) to investigate number patterns and relationships.	2	
		Skip counting	2. Count by 2's, 5's, 10's, 20's, and 100's.		
	Counting	Sequences of	3. Identify the pattern in a sequence of numbers.	4	
		numbers	4. Complete sequences of numbers.		
		Problem solving	5. Create and solve problems involving whole number concepts.		
Icepts		Reading and writing numbers	6. Read numbers up to 999.		
Number Concepts			7. Write numbers up to 999 in words and symbols.		3.0 wk
Nur		Place value	8. Identify the place value and total Value of any digit in two- and three- digit numbers.		
	Whole Numbers		9. Explain the difference between place value and total value.	15	
		Expanded notation	10. Write numbers with up to three digits in expanded notation.		
		Ordering numbers	11. Arrange a set of two- and/or three-digit numbers in order of magnitude and give reasons for the arrangement.		
		Rounding-off	12. Round off three-digit numbers to the nearest ten or hundred.		
		numbers	13. Round off two-digit numbers to the nearest ten.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			1. Decide when it is appropriate to carry out computation mentally, using pencil and paper, or using a calculator.		
		Use of computation	2. Explain how to use a calculator to carry out the four basic operations.		
		strategies	3. Use the calculator to carry out calculations, when necessary.		
	General		4. Use mental computation strategies to carry out calculations, when necessary.	6	
		Estimation	5. Estimate the answer to a computation.		
		Checking answers	6. Determine the reasonableness of answers obtained from any of the four operations of whole numbers, and give reasons for their conclusions.		
		Problem solving	7. Create and solve problems involving addition of whole numbers, with totals up to 999.		
ion		Basic facts	8. Recall the basic facts for addition and subtraction.		
Computation		Addition without	9. Explain the regrouping process for addition.		3.0 wk
Cor			10. Add numbers with up to three digits, without regrouping.		
		and with regrouping	11. Add numbers with up to three digits, with regrouping in one column/place only.		
	Whole Numbers		12. Add numbers with up to three digits, with regrouping in two columns/places.	15	
	Numbers	Problem solving	13. Create and solve problems involving subtraction of numbers with up to three digits.		
			14. Recall the basic facts for subtraction.		
		Subtraction	15. Carry out subtraction involving numbers with up to three digits, without regrouping.		
		without and with regrouping	16. Carry out subtraction involving numbers with up to three digits with regrouping in one places/columns.		
			17. Carry out subtraction involving numbers with up to three digits with regrouping in two places/column.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	General		1. Identify and describe situations in everyday life that involve data collection and data representation.	2	
		real life	2. State reasons why people collect data.		
			3. Describe how to collect data using observation.		
			4. Describe how to collect data using interviewing.		
		and interviewing	<ol><li>Explain when it is appropriate to use observation and interviews to collect data.</li></ol>		
S	Data Collection	Problem solving	<ol><li>Create problems that may be answered through data collection, representation and interpretation.</li></ol>	8	
Statistics		Dianning for data	7. Plan for data collection activities.		2.5 wk
St		Planning for data collection	<ol> <li>Collect sets of data through observation and interviews to answer questions of interest.</li> </ol>		
	Data Representation	Data Use of tally charts, presentation tables, and graphs	9. Explain the concept of 'tally chart'		
			10. Explain how to use tallies to construct a table.	7	
			11. Use tally charts and tables to organise collected data.		
			12. Describe the characteristics of pictographs in which one picture represents one unit of data.		
			13. Describe the characteristics of pictographs in which one picture represents more than one unit of data.		
		Parts of a three- dimensional	1. Identify the faces, edges, and vertices of three-dimensional shapes.		
		shape: Faces, edges, and vertices	<ol><li>Describe three-dimensional shapes in terms of the number of edges and vertices, and the number and type of faces.</li></ol>		
ry	Thurse	0	<ol> <li>Describe the cube, cuboid, cylinder, cone, and sphere in terms of the number and type of faces and the number of edges and vertices.</li> </ol>		
Geometry	Three- Dimensional Shapes	Concept of a cube, cuboid, cylinder, cone, and sphere	4. Sort examples of the cube, cuboid, cylinder, cone, and sphere.	14	2.0 wk
			5. Identify and name examples of cube and cuboids, cylinders, cones, and spheres.		
		Comparison of cubes and	<ol><li>Identify the similarities and differences between the cube and cuboid.</li></ol>		
		cuboids; cylinders and cones	7. Identify similarities and differences between the cylinder and cone.	d	

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Selection of	<ol> <li>Select and use appropriate instruments for measuring lengths, heights, mass, and capacity of objects.</li> </ol>		
		instruments and units of measurement	<ol> <li>Explain how to use the various instruments for measuring length, mass, and capacity</li> </ol>		
	General	Use of instruments	<ol> <li>Identify the most appropriate unit to measure the length, mass, or capacity of a given object and give reasons for their selection.</li> </ol>	5	
		Problem solving	<ol> <li>Create and solve problems involving linear measurement and measurement of mass, capacity, or temperature.</li> </ol>		
			<ol><li>Estimate and measure lengths and heights using the metre as the unit of measure.</li></ol>		
nent	Linear Measurement	Linear easurement Linear Use of the metre and centimetre as units of measure	<ol><li>Estimate and measure lengths and heights using the centimetre as the unit of measure.</li></ol>	7	
Measurement			7. Explain why there is a need for a smaller unit of measure - the centimetre.		2.5 wk
			8. Estimate and measure distances using the metre as the unit of measure.		
		Comparison of linear measures	9. Compare linear measures of two or three objects.		
		Estimation and measurement of	10. Estimate and measure the mass of objects using the kilogram as the unit of measure.		
	Mass	mass using the kilogram and gram	11. Estimate and measure the mass of objects using the gram as the unit of measure.		
		Comparison of the mass of objects	12. Identify situations in everyday life where the kilogram and gram are used as the unit of measure.		
			13. Compare the mass of two or three objects.		

# Section 5.2 Grade 3 — Term 2

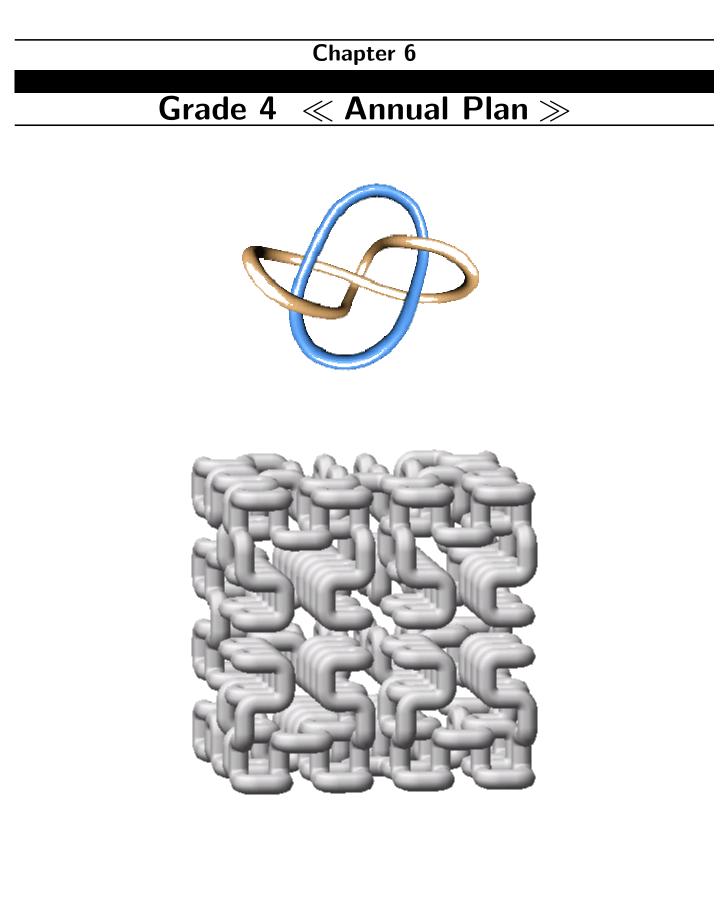
Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons	
cepts			14. Explain the concepts of 'even number' and 'odd number'.			
		Odd and even numbers	15. Classify numbers as odd or even.			
			16. Describe relationships between odd and even numbers.			
Number Concepts	Whole Numbers	Ordinal numbers	17. Define and use number-associated vocabulary, e.g., pair, dozen, double, triple, etc.	10	1.5 wk	
qmu			18. Identify the ordinal position of an object in an arranged set.			
Z		Number- associated vocabulary	19. Identify the object that is in a given ordinal position in an arranged set.			
		Problem solving	18. Create and solve problems involving multiplication by one- digit numbers.			
		Multiplication by	19. Use several strategies to recall basic facts related to multiplication by 2, 3, 4, 5, and 6.			
Computation	Whole Numbers	10 and 100	20. Multiply a two-digit number by 2, 3, 4, 5, 6, 10, and 100, without and with regrouping.	- 18	2.5	
Comp		Problem solving	21. Create and solve problems involving division by one-digit numbers.		wk	
				22. Use several strategies to build up the by 2, 3, 4, 5, and 6.	22. Use several strategies to build up the basic facts for division by 2, 3, 4, 5, and 6.	
		subtraction	23. Use repeated subtraction to divide a two-digit number by a one-digit number, without and with remainders.			
		Use of tally charts,	14. Describe the characteristics of bar graphs in which one block represents one unit of data.			
		tables, and graphs	15. Describe the characteristics of bar graphs in which one block represents more than one unit of data.			
Statistics	Data	Introduction to	16. Explain why it may be necessary to use one picture or block to represent more than one unit of data.	12	1.8	
Stati	Representation	scales	17. Select an appropriate method (pictograph or bar graph) and scale to represent a set of collected data.	12	wk	
		Selecting data representation	18. Draw pictographs and bar graphs to represent collected data.			
		methods	19. Explain the advantages of representing data in tables and graphs.			

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Concept of a	8. Identify and name squares, rectangles, triangles, and circles.		
		square rectangle, triangle, and circle	<ol><li>Describe squares, rectangles, and triangles in terms of the number and length of their sides.</li></ol>		
		Line segments	10. Draw and label line segments e.g., line segment AB.		
У			11. Identify curves and straight line segments.		
Geometry	Plane Shapes	Curves, types of curves	12. Explain the concepts of 'open curve' and 'closed curve'.	16	2.2
Gec			13. Identify and draw open and closed curves.		wk
		Concept of angle, right angle	14. Explain the concepts of angle and right angle.		
		Relating angles to	15. Identify the angles in a diagram.		
		the right angle	16. Identify angles that are equal to, greater than, and smaller than a right angle.		
	Capacity		14. Estimate and measure the capacity of containers using the litre as the unit of measure.	5	
		Capacity Capacity using the	15. Estimate and measure the capacity of containers using the centilitre as the unit of measure.		
			16. Describe situations in real life where the litre and centilitre are used as unit of measure.		
			17. Explain why there is a need for the centilitre as a unit of measurement of capacity.		
			18. Describe real life situations that involve measurement of temperature.		
Irement		temperature	19. Describe the instruments that are used to measure temperature.		2.0
Measurer	Temperature	Reading measurements of temperature	20. Read recorded temperature.	5	wk
		Describing measurements of temperature	21. Describe recorded temperatures using phrases such as 'warm', 'very hot', etc.		
		Introduction to perimeter	22. Explain the concept perimeter		
	Perimeter	Calculating perimeter by measurement and addition	23. Use measurement and addition to calculate the perimeter of objects.	4	

# Section 5.3 Grade 3 — Term 3

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			20. Represent fractions of a whole or group, using concrete objects, pictures/diagrams, and numerals.		
S			21. Identify fractions of a whole or group.		
Number Concepts		Concepts of	22. Explain the concept of a fraction.		
er Co	Fractions	numerator and denominator	23. Explain the concepts of 'numerator' and 'denominator'.	14	2wk
lumbe			24. Identify the numerator and denominator in a fraction.		
Z		Comparison of	25. Compare unit fractions using the symbols '<' and '>'.		
		Comparison of fractions	26. Compare fractions with like denominator using the symbols '<' and '>'.		
		Addition of proper	24. Add two proper fractions with like denominator.		
Computation	Fractions denominator objects	25. Calculate a fraction of a group of objects, using concrete objects or pictures/diagrams.	14	2wk	
Con		Problem solving	26. Create and solve problems involving addition of fractions and fractions of a group of objects.		
Statistics	Data	Reading information presented in tables and graphs	20. Read data presented in tables, pictographs, and bar graphs.	7	1wk
Stati	Interpretation	Answering	21. Interpret data presented in tables, pictographs, and bar graphs.	7	TWK
		Drawing two- dimensional	17. Describe two-dimensional shapes in terms of the number and length of their sides and the number and type of angles.		
letry		shapes	18. Draw two-dimensional shapes according to specific directions (e.g., a shape that is closed with one right angle).		1.5
Geometry	Plane Shapes		19. Identify objects that are symmetrical.	10	wk
		Symmetry	20. Identify and draw the lines of symmetry of a cutout or diagram.		
			21. Explain what is a line of symmetry.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Time-related vocabulary	24. Use appropriate vocabulary in description of real life situations involving time, e.g., earlier, later, now, noon, next week, in a week's time, in an hour, etc.		
		Problem solving	25. Create and solve problems involving time.		
		Use of the calendar	26. State and write dates in a variety of ways.		
	Time	Time on the hour, half-hour, quarter-	27. State and write time on the hour, half-hour, quarter hour and five-minute intervals in a variety of ways.	13	
		hour, and five minute intervals	28. Represent time on the hour, half-hour, quarter hour and five-minute intervals.		
		Relationships	29. Use a clock or calendar to determine the duration of an event (e.g., a lesson, assembly, school vacation).		
		between units of time	30. State the relationship between units of time: hour and minute, year and month, week and day.		
Measurement		Money-related vocabulary	31. Use appropriate vocabulary to describe situations involving money, e.g., change, total cost, cost per item, etc.		3.5 wk
Mea		Problem solving	32. Create and solve problems involving money.		
		Reading and representing amounts of money	33. Read and write amounts of money up to \$999.		
			34. Identify the coins in circulation.		
	Money	Description of Eastern Caribbean	35. Describe the \$5, \$10, \$20, and \$50 notes.	12	
		currency	36. Represent amounts of money up to \$50 using various combinations of notes, \$1 coins, and other coins as necessary.		
			37. Calculate the cost of a set of similar items given the cost of one item.		
		Calculations involving money	38. Calculate the total cost of a set of items, with totals up to \$20.		
			39. Calculate change from amounts up to \$20.		



#### Section 6.1 Grade 4 — Term 1

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Problem solving	1. Create and solve problems involving place value, factors, multiples, and fractions.		
	General	Investigative strategies	<ol> <li>Use appropriate strategies (pen and paper computation, mental computation, or a calculator) to investigate number concepts.</li> </ol>	3	
		Counting forwards and backwards Skip counting Counting on	<ol> <li>Count in a variety of ways: counting forward, counting backwards, skip counting, counting on.</li> </ol>		
	Counting		4. Identify the pattern in a sequence of numbers	4	
			5. Complete sequences of numbers.		
			6. Generate number sequences.		
epts		Reading and	7. Read numbers, up to 9 999.		
Conc		writing numbers	8. Write numbers up to 9 999 in words and numerals.		3.0
Number Concepts				9. Identify the place value and total value of any digit in numbers up to 9 999.	
		Place value	10. Write numbers up to 9 999 in expanded notation.		
			11. Arrange a set of two-, three-, and/or four-digit numbers in order of magnitude.		
	Whole Numbers		12. Explain the meaning of factors and multiples.	14	
			13. Generate multiples of a given number.		
		Factors and multiples	14. List the factors of a given number.		
		Primes and composites	15. Explain the concepts of prime number and composite number.		
			16. Identify prime numbers and composite numbers.		
			17. Classify numbers in a variety of ways, e.g., as primes, composite, odd, and/or even.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Computation-	1. Use computation vocabulary (e.g., sum, product, total, etc.) to describe situations that involve any of the four basic operations.		
		Relationships among the four basic operations	<ol> <li>Explain the relationships that exist among the four basic operations.</li> </ol>		
		Checking the reasonableness of	<ol> <li>Explain strategies that may be used to determine the reasonableness of answers.</li> </ol>		
		answers	4. Determine the reasonableness of an estimated or exact answer to a computation, and justify their conclusion.		
	General		5. Explain mental computation strategies that may be used in calculation involving addition, subtraction, multiplication or division.	7	
		Computation strategies	<ol> <li>Explain pencil and paper computation procedures that may be used in calculations involving addition, subtraction, multiplication, and division.</li> </ol>		
Computation			7. Explain how to use a calculator to carry out addition, subtraction, multiplication, or division.		2.5 wk
Com			8. Select an appropriate computation strategy (mental computation, use of pencil and paper, or use of a calculator) to carry out addition, subtraction, multiplication, or division.		WK
		Problem solving	9. Create and solve problems involving addition, subtraction, multiplication, and /or division.		
			10. Recall the basic facts for addition and subtraction.		
		Basic facts	11. Use several strategies to recall the basic facts for multiplication and division.		
	Whole Numbers		12. Add numbers with up to four digits without regrouping.	11	
	Numbers	Addition without and with rearouping	13. Add numbers with up to four digits with regrouping in one place/column only.	-	
			14. Add numbers with up to four digits with regrouping in two places/columns.		
			15. Add numbers with up to four digits with regrouping in three places/ columns.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	General	Use of statistics in real life	1. Analyse real-life situations that involve data management to identify the questions, data collection methods, and data representation methods that were used.	3	
			2. State reasons why people collect data.		
			3. Describe the characteristics of questionnaires.		
		Use of observation	4. Prepare simple questionnaires and interviews.		
Statistics		and interviewing	5. Describe procedures for collecting data using observation, interviews, or simple questionnaires.		2.0 wk
	Data Collection	questionnaires	<ol><li>Generate questions that may be answered through data collection, representation and interpretation.</li></ol>	11	
		Planning for data collection	7. Plan data collection activities.		
		Collecting data	8. Collect data through observation, interviews, or simple questionnaires.		
		Attributes of cubes, cuboids, cylinders, cones, and spheres	<ol> <li>Identify the relationship between the number of faces, edges, and vertices of cubes and cuboids.</li> </ol>		
	Three- Dimensional	Nets of cubes and cuboids	2. Make nets of cubes and cuboids.	8	
	Shapes	Making cubes and cuboids	3. Construct cubes and cuboids.		
Geometry		Problem solving	4. Create and solve problems based on the attributes of cubes, cuboids, cylinders, cones and spheres.		2.0 wk
			5. Explain the concepts of angle and right angle.		
			6. Draw and label angles e.g., angle A.		
	Plane Shapes	Angles	7. Classify angles according to size, e.g., angles less than a right angle, angles larger than a right angle, angles that are right angles.	6	
			8. Identify right angles in two-dimensional and three- dimensional shapes.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Problem solving	1. Create and solve problems involving measurement.		
		Use of measurement instruments	<ol> <li>Explain how to use various instruments of measurements (ruler, scale, etc).</li> </ol>		
	General	Selection of instruments and	3. Select the most appropriate instrument to measure an object.	3	
		units of measurement	4. Select the most appropriate unit to measure an object.		
		Recording measurements	5. Read and record measurements using appropriate notation.		
		Estimation and measurement using the metre, centimetre, and millimetre	<ol> <li>Estimate and measure lengths and heights of objects using the metre and/or centimetre as the unit of measure.</li> </ol>		
			7. Draw a line segment of a given length in centimetres.		
	Linear Measurement	easurement between units	<ol> <li>Measure line segments and curves using the centimetre as the unit of measure.</li> </ol>	13	
ent			9. Justify the need for the millimetres as a unit of measure.		
Measurement			10. Estimate and measure lengths of objects using the millimetres as the unit of measure.		3.5 wk
Mea			11. State the relationship between the millimetre and centimetre, and the millimetre and metre.		
			12. Compare the length or height of objects given their measurement in the same or different units.		
			13. Explain what is a scale drawing and how scale drawings are used in real life.		
		Scale drawing	14. Use circle drawings (e.g. maps) to determine distances in kilometres or metres.		
		Estimation and	15. Estimate and measure the mass of objects using kilograms and grams.		
		measurement	16. Justify the need for milligrams as a unit of mass.		
	Maaa	using the kilogram, gram, and milligram	17. Describe situations in real life where the milligram is used as a unit of measure.	. 8	
	Mass		18. Estimate and measure the mass of objects in milligrams.		
		Relationships	19. State the relationship between the milligram and gram, kilogram and gram.		
		between units	20. Compare the mass of objects given their measurement of mass in the same or different units.		

#### Section 6.2 Grade 4 — Term 2

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons	
pts		Least common	18. Find the least common multiple of two or three whole numbers, by listing multiples.			
		multiple	19. Find the highest common factor of two or three numbers by listing factors.			
Number concepts	Whole Numbers	Rounding off	20. Round off two-, three-, or four-digit numbers to the nearest 10.	11	1.5 wk	
umbe			21. Round off three- or four-digit numbers to the nearest 100.			
Z			22. Identify the ordinal position of an object in an arrangement.			
		Ordinal numbers	23. Identify the object that corresponds to a given ordinal position in an arrangement.			
			16. Carry out subtractions involving numbers with up to four digits, without regrouping.			
	wi	Subtraction	Subtraction without and with	17. Carry out subtraction involving numbers with up to four digits, with regrouping in one place/column only.		
		regrouping 18. Carry out subtraction involving numbers with u digits, with regrouping in two places/columns.	18. Carry out subtraction involving numbers with up to four digits, with regrouping in two places/columns.			
			19. Carry out subtraction involving numbers with up to four digits, with regrouping in three places/columns.			
Computation	Whole Numbers	Addition without and with regrouping Subtraction without and with regrouping	20. Explain the regrouping process for addition and subtraction.	21	3.0 wk	
CC		Multiplication by one- and two-digit	21. Multiply a two-digit number by a one-digit number, with and without regrouping.			
		numbers	22. Multiply a two-digit number by a two-digit number.			
		Division by one-	23. Divide a two-digit number by one-digit number, with and without remainder.			
		digit numbers	24. Divide a three-digit number by a one-digit number, without and with remainder.			
		Calculations	25. Explain the meaning of the remainder in division.			
		involving brackets	26. Carry out calculations involving brackets and several operations.			

Stra nds	Topics	Sub Topics	Learning Outcomes	Less	sons
		Use of tales and graphs	9. Use tally charts and tables to organize collected data.		
stics	Data		10. Select appropriate means (pictograph or bar graph) to represent collected data, and give reasons for their selection.	10	1.5
Statistics	Representation	Selection of appropriate scales for drawing graphs	11. Select appropriate scales for constructing pictographs and bar graphs.	10	wk
			12. Construct pictograph and bar graphs to represent organised data.		
		Attributes of two- dimensional shapes	9. Describe two-dimensional shapes in terms of number of sides and the number and measure of angles.		
ry			10. Classify triangles according to the measure of their angles.		
Geometry	Plane Shapes	Attributes of triangles, squares,	11. Describe the attributes of squares and rectangles.	10	1.5 wk
		rectangles, and circles	12. Identify the similarities and differences between squares and rectangles.		
			13. Explain how squares and rectangles are related.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			21. Estimate and measure the capacity of containers in litres or centilitres.		
		Estimation and measurement using the litre,	22. justify the need for the millimetre as a unit of measure of capacity.	8	
	Capacity	centilitre, and millilitre as units of measure	23. Estimate and measure the capacity of containers using the millilitre as the unit of measure.		
	Gapacity		24. Describe situations in real life where the millilitre is used as a measurement of capacity.	0	
		Relationships between units	25. State the relationship between the millilitre and centilitre, the millilitre and litre.		
ent			26. Compare the capacity of containers given their measurement of capacity in the same or different units.		
Measurement		reading temperatures	27. Read recorded temperatures.		2.5 wk
Me			28. Identify the scales that are used to measure temperature.	5	
	Temperature		29. Measure their body temperature and the temperature of liquids.		
		related to common everyday situations	30. Indicate and write temperatures associated with real life situations. (e.g., normal body temperature; freezing and boiling points of water; oven temperature for baking a cake etc.)		
		Calculation of perimeter	31. Calculate the perimeter of a two-dimensional shape.		
	Perimeter and Area	erimeter and Introduction to the concept of area 32. Explain the concept of area.		5	
		Area by counting squares	33. Find the area of two-dimensional shapes by counting squares.		

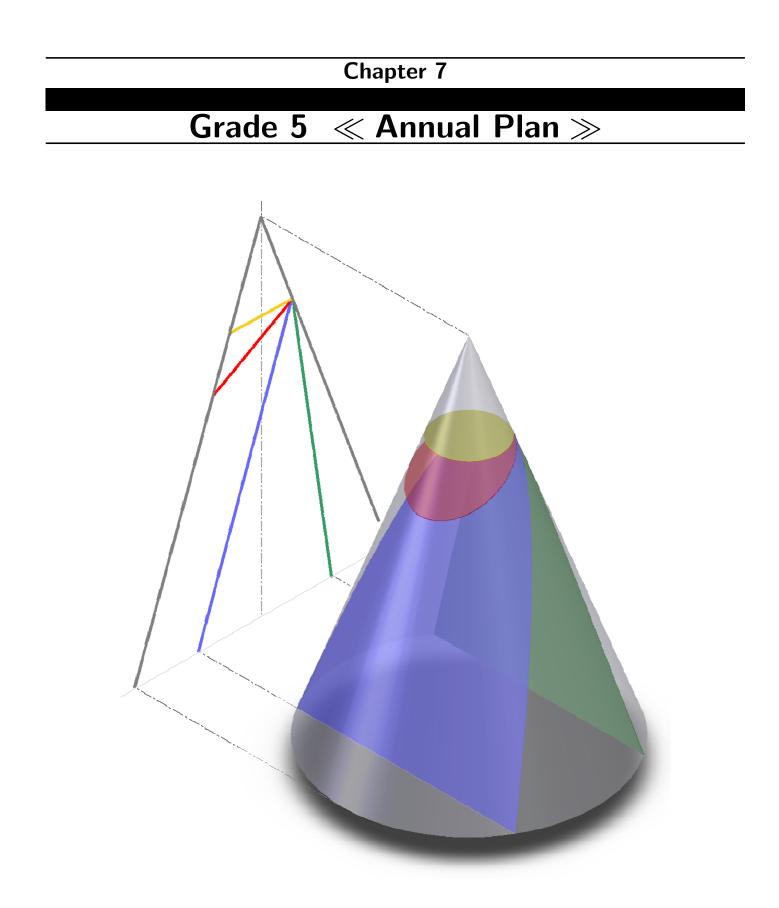
#### Section 6.3 Grade 4 — Term 3

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons		
		Representing unit	24. Identify unit and proper fractions of a whole or group of objects.				
		and proper fractions	25. Represent unit and proper fractions of a whole or group of objects.				
			26. Sequence unit fractions in order of magnitude.				
			27. Compare proper fractions with like denominator.				
		Comparing and sequencing fractions	<ul> <li>28. Sequence proper fractions with like denominator in order of magnitude.</li> <li>29. Compare fractions with unlike but related denominators.</li> </ul>	of			
ncepts							
Number Concepts	Fractions			Fractions 30. Sequence fractions with unlike but related denominators order of magnitude.	30. Sequence fractions with unlike but related denominators in	n 14	2.0 wk
2		31. Explain the concepts of improper fractions and numbers.	31. Explain the concepts of improper fractions and mixed numbers.				
		Improper fractions and mixed	32. Identify improper fractions and mixed numbers.				
			33. Convert improper fractions to mixed numbers and mixed numbers to improper fractions, using concrete objects and pictures/diagrams.				
			34. Generate sets of fractions that are equivalent to a given fraction.				
		fractions	35. Explain the meaning of the term 'equivalent fractions.'				

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		2	27. Add a fraction to a whole number.		
		Addition of proper fractions	28. Add two proper fractions with like denominators.		
			29. Add two proper fractions with unlike but related denominators, using concrete objects and pictures/diagrams.		
utation	Fractions		30. Carry out subtraction involving two proper fractions with like denominators, no regrouping;	17	2.5
Computation	Fractions	Subtraction of proper fractions	31. Carry out subtraction involving two proper fractions with unlike but related denominators, no regrouping, using concrete objects and pictures/diagrams.	. 17	wk
		32. Multiply a fraction by a whole number, using concre Multiplication of proper fractions	32. Multiply a fraction by a whole number, using concrete objects and pictures/diagrams.		
		and whole numbers	33. Multiply a whole number by a proper fraction, using concrete objects and pictures/diagrams.		
		Reading data presented in tables and graphs	13. Read data represented in tables, pictographs and bar graphs.		
Statistics	Data Interpretation	Answering questions based on information presented in tables and graphs	14. Interpret data represented in tables, pictograph, and bar graphs.	7	1.0 wk

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Attributes of	14. Explain the concepts of radius, diameter, and centre of a circle.		
		triangles, squares, rectangles, and circles	15. Identify the centre of a circle.		
			16. Identify and draw radii and diameters of a circle.		
			17. Draw and label line segments (e.g., line segment AB).		
		Line segments, types of line segments	18. Identify and draw horizontal and vertical line segments.		
		Participation       19. Identify and draw intersecting lines.         Participation       20. Classify curves as simple, open, or closed.         Types of curves       21. Draw curves according to given directions, e.g., simple, open, simple and closed, simple and open, etc.		- 14	
Geometry	Plane Shapes				2.0 wk
0					
			22. Explain the concept of a point.		
		Concept of a point	23. Represent points.		
			24. Identify and draw points inside or outside a closed figure.		
		Symmetry	25. Identify and draw lines of symmetry in an object or diagram.		
		бупппецу	26. Complete drawings of diagrams that are symmetrical.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			34. Tell and write the time on the hour, half hour, quarter hour, and 5-minute intervals in a variety of ways.		
		Telling and representing time	35. Tell and write time using one-minutes intervals in a variety of ways.		
			36. Represent a given time on an analogue or digital clock.		
			37. State and write dates in a variety of ways.		
	Time	Time-related vocabulary	38. Use time-related vocabulary to describe real life situations: e.g., anniversary, decade, century, millennium, and leap year.	9	
		Relationships between measures of time	39. State the relationship between measures of time: e.g., week and day, day and year, year and month, hour and minute.		
nt		Duration between events	40. Estimate and measure the duration of an event and the time between two events.		
Measurement		Time between events	41. Calculate the duration of an event, and the time between two events.		2.5 wk
Me		Description of Eastern Caribbean currency	42. Describe the notes and coins in circulation.		
		Poprocenting	43. Read and write amounts of money up to \$9999.99.		
		Representing amounts of money	44. Represent amounts of money up to \$100 using various combinations of notes and coins.		
	Money		45. Calculate the total cost of a set of items, given the price per item or the price of a multiple of items.	9	
		Calculations involving money	46. Calculate change from amounts up to \$50.		
			47. Fill in bank deposit and withdrawal slips.		
		Money-related vocabulary	48. Use vocabulary associated with money and spending: e.g., sale, per, each, for each, discount, \$ off, expensive, cheap etc.		



<u>7.1–Grade 5 — Term 1</u>

## Section 7.1 Grade 5 — Term 1

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	Counting	Counting on Counting backward Skip counting	1. Count in a variety of ways: counting on, counting backwards, skip counting.	3	
		Sequences of numbers	2. Complete sequences of numbers.		
		Problem solving	<ol><li>Create and solve problems involving factors and multiples of whole numbers.</li></ol>		
		Representing	4. Read numbers up to 99999.		
		numbers	5. Write numbers up to 99999 in words and numerals.		
		Place value	<ol><li>Identify the place and total value of any digit in a number up to five digits.</li></ol>		
		Expanded notation	7. Write numbers up to five digits in expanded notation.	18	
ncepts			8. Classify numbers using several number concepts: e.g., prime, odd, prime and even, prime and odd, composite and odd, etc.		
Number Concepts			9. Explain how the various types of numbers (prime, composite, odd, etc) are related.		3.0 wk
Num	Whole		10. List multiples of a given number.		
			11. List factors of a given number.		
		multiples	12. Explain the concept of prime factor.		
			13. Write a number as a product of its prime factors.		
			14. Calculate the least common multiple of two or three numbers by listing multiples or using prime factorisation.		
		H.C.F. and L.C.M.	15. Explain the concept of 'highest common factor'.		
			16. Find the highest common factor of two or three numbers by listing factors or prime factorisation.		
		Rounding off	17. Round off numbers with up to five digits to the nearest ten, hundred, or thousand.		
			18. Round off numbers with up to three digits to the nearest ten, hundred.		
		Ordering numbers	19. Arrange a set of whole numbers in order of magnitude.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		computation-	1. Use computation vocabulary (e.g., sum, product, total, etc.) to describe situations that involve any of the four basic operations.		
		Relationships among the four	<ol><li>Explain the relationships that exist among the four basic operations.</li></ol>		
		basic operations	3. Explain the likely effects of an operation.		
		Checking the	4. Estimate the answer to a computation.		
		reasonableness of answers	5. Determine the reasonableness of an estimated or exact answer to a computation, and justify their conclusion.		
	General		<ol> <li>Explain mental computation strategies that may be used in calculations involving addition, subtraction, multiplication and division.</li> </ol>	7	
		Computation strategies	7. Explain pencil and paper computation procedures that may be used in calculations involving addition, subtraction, multiplication, and division.		
ation			8. Explain how to use a calculator to carry out addition, subtraction, multiplication, or division.		
Computation			9. Select an appropriate computation strategy (mental computation, use of pencil and paper, or use of a calculator) to carry out any of the four basic operations.		3.0 wk
		Basic facts	10. Recall the basic facts for addition, subtraction, multiplication, and division of whole numbers		
		Problem solving	11. Create and solve problems involving addition, subtraction, multiplication, and/or division of whole numbers.		
		Addition without and with regrouping	12. Add sets of numbers with totals up to 99999, without and with regrouping.		
	Whole Numbers	Subtraction without and with regrouping	13. Carry out subtraction involving whole numbers with up to five digits, without and with regrouping.	14	
		Multiplication by one-and two-digit numbers	14. Multiply two and three-digit numbers by one- and two- digit numbers.		
		Division by one- and two-digit numbers	15. Divide whole numbers with up to five digits by one- and two- digit numbers, without and with remainder.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Use of statistics in	<ol> <li>Identify and describe situations where data collection, representation, and interpretation could be used to solve problems.</li> </ol>		
	General	real life	<ol><li>Create problems whose solutions require data collection, representation and/or interpretation.</li></ol>	3	
		Problem solving	<ol> <li>Solve problems involving data collection, representation and/or interpretation.</li> </ol>		
ics		Use of	<ol> <li>Describe procedures for collecting data using observation, interview, or simple questionnaires.</li> </ol>		
Statistics		observation, interviews, and questionnaires	<ol> <li>Identify similarities and differences between interviews and questionnaires.</li> </ol>		2.0 wk
	Data Collection	Data Collection Data Collection collection methods Planning data	<ol><li>Explain when it is appropriate to use interviews and questionnaire to collect data.</li></ol>	11	
			7. Select the data collection method that is appropriate for a particular problem situation, and give reasons for their selection.		
			8. Plan data collection activities.		
		-	<ol> <li>Collect data using observation, interviews, or simple questionnaires.</li> </ol>		
			1. Describe three-dimensional shapes in terms of the number and type of faces and the number of edges and vertices		
		Attributes of three- dimensional shapes	<ol> <li>Generate and test hypothesis for the purposes of identifying three-dimensional shapes that are appropriate for particular functions in real life</li> </ol>		
etry	Three	Use of three- dimensional shapes in real life	<ol> <li>Use the attributes of a three-dimensional shape to formulate reasons for its uses in everyday life.</li> </ol>		2.0
Geometry	Dimensional Shapes		<ol> <li>Identify and describe cubes, cuboid, cylinders, cones and spheres.</li> </ol>	14	wk
		Nets of cubes, cuboids, and	5. Make nets of cubes, cuboids, and cylinders.		
		cylinders	6. Identify nets that will form a cube, cuboid, and cylinder.		
		Construction of cubes, cuboids, and cylinders	7. Construct cubes, cuboids, and cylinders.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Selection of instruments and	1. Select the most appropriate instrument to estimate and measure a length, the mass, or the capacity of a given object.		
	General	units of measurement	<ol> <li>Select the most appropriate unit to estimate and measure a length, the mass, or the capacity of a given object.</li> </ol>	4	
		Reading and recording measurement	3. Read and record estimates and measurements using appropriate notation.		
			<ol> <li>Estimate and measure lengths and heights using the metre, centimetre, and/or millimetre as the units of measure.</li> </ol>		
	Linear Measurement	Use of the kilometre,	<ol> <li>Estimate and measure distances using the metre and/or centimetre as the units of measure.</li> </ol>		
		easurement of measure Scale drawings	<ol><li>Identify and interpret the scale that was used in a scale drawing.</li></ol>	7	
Measurement			7. Use scale drawings to determine actual measurements in metres or kilometres.		3.0 wk
Mea			8. Make simple scale drawings.		
		Problem solving	9. Create and solve problems involving linear measurement.		
	Mass	Use of the kilogram, gram and milligram as units of measure	10. Estimate and measure the mass of objects using kilograms, grams, and/or milligrams as the units of measure.	4	
		Problem solving	11. Create and solve problems involving mass.		
	Capacity	Use of the litre, centilitre, and millilitre as units of measure	12. Estimate and measure the capacity of containers using litres, centilitres, and/or millilitres as the units of measure.	4	
		Problem solving	13. Create and solve problems involving capacity.		
	Temperature	Use of the Celsius scale	14. Estimate and measure temperatures using the Celsius scale.	2	

#### Section 7.2 Grade 5 — Term 2

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Representation of fractions	20. Use diagrams/pictures to represent unit, proper, and improper fractions and mixed numbers.		
		Mixed numbers and improper fractions	21. Convert an improper fraction to a mixed number and a mixed number to an improper fraction.		
	Fractions	Equivalent	22. Explain the concept of 'lowest terms' and its relationship to equivalent fractions.	8	
		fractions	23. Express fractions in their lowest terms.		
			24. Generate fractions that are equivalent to a given fraction.		
		Least common 25. Calculate the least common denominator for fractions denominator unlike but related denominators.	25. Calculate the least common denominator for fractions with unlike but related denominators.		
		Ordering fractions	26. Arrange a set of fractions in order of magnitude.		
Number Concepts		The relationship between decimals and whole numbers	27. Explain how decimal numbers and whole numbers are related.		2.5 wk
Numb		Place value and total value	28. Identify the place and total value of the digits in a decimal number with up to two decimal places.		
		Representation of	29. Represent simple decimal numbers with up to two decimal places (e.g., 1.5, 2.21) using diagrams.		
	Decimals	decimals	30. Read and write decimal numbers with up to two decimal places.	10	
		Ordering decimals	31. Arrange a set of decimal numbers with up to two decimal places in order of magnitude.		
		The relationship between fractions and decimals	32. Explain how fractions and decimals are related.		
		Simple conversions	33. Write a decimal number as a fraction.		
		involving decimals and fractions	34. Write a fraction as a decimal number.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Problem solving	16. Create and solve problems involving addition, subtraction, or multiplication of fractions.		
		Addition of proper fractions	17. Add proper fractions with like or unlike but related denominators.		
		Addition of proper fractions and whole numbers	18. Add a whole number to a proper fraction.		
		Addition of proper	<ol> <li>Add a proper fraction and a mixed number with like enominators.</li> </ol>		
		fractions and mixed numbers	20. Add a proper fraction and a mixed number with unlike but related denominators.		
ion		Subtraction of	<ul> <li>21. Carry out subtraction involving proper fractions with like denominators.</li> <li>22. Carry out subtraction involving proper fractions with unlike but related denominators.</li> </ul>		
Computation	Fractions	proper fractions		ke 14	14
			Subtraction of	<ul> <li>denominators.</li> <li>22. Carry out subtraction involving proper fractions with unlike but related denominators.</li> <li>23. Subtract a proper fraction from a mixed number with like denominator, without regrouping.</li> <li>24. Subtract a proper fraction from a mixed number with unlike</li> </ul>	
		proper fractions from whole numbers and mixed numbers	24. Subtract a proper fraction from a mixed number with unlike but related denominator, without regrouping.		
			25. Subtract a proper fraction by a whole number.		
		Multiplication of	26. Multiply a proper fraction by a whole number.		
		proper fractions and whole	27. Multiply a whole number by a proper fraction.		
		numbers	28. Multiply two proper fractions.	-	
		Division of proper fractions by whole numbers	29. Divide a proper fraction by a whole number.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Solaction of	10. Select appropriate methods to represent data.		
			11. Select appropriate scales to represent data graphically.		
		methods and scales	12. Explain why a selected data representation method or scale is appropriate.		
SC		Use of tables and	13. Use tally charts and tables to organise collected data.		
Statistics	Data Representation	graphs	14. Represent data using pictographs or bar graphs.	10	1.5 wk
S		Introduction to line graphs	15. Describe the characteristics of line graphs.		
		Comparison of bar graphs and line	16. Identify similarities and differences between bar graphs and line graphs.		
		graphs	17. Explain when it is appropriate to use bar graphs and line graphs to represent data.		
		Types of angles	8. Identify angles in three-dimensional and plane shapes.		
			9. Draw and label angles (e.g., angle A)		
			10. Explain what is a right angle.		
			11. Classify angles according to size, as equal to, larger than, or smaller than a right angle.		
			12. Describe acute and obtuse angles.		
			13. Identify cute and obtuse angles.		
letry			14. Draw and label line segments (e.g., line segment AB).		1.8
Geometr	Plane Shapes		15. Explain the concepts of horizontal, vertical, parallel, and perpendicular lines.	13	wk
		Types of line	16. Identify horizontal and vertical line segments.		
		segments	17. Draw horizontal and vertical line segments.		
			18. Identify parallel and perpendicular lines.		
			19. Draw parallel and perpendicular lines.		
		Attributes of two- dimensional shapes	20. Describe two-dimensional shapes in terms of the number and type of angles and sides.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Relationships among units of measure of the same attribute	15. Explain the relationships that exist among metric units of measure of the same attribute. (E.g., 100 cm = 1m; $1I = 1000$ ml, 1 Kg = 1000 g etc.)		
	Relationships among Metric Units	Recording measurements	16. Use the relationships among the metric units to carry out simple conversions involving measurements of the same attribute.	4	
		Simple conversions	17. Use the relationships among metric units to record measurements. (E.g., a measurement of 2 m 85 cm could be written as 2.85m).		
	Imperial Units	Estimation and measurement using common imperial units	18. Estimate and measure the length, mass, or capacity of objects using common Imperial units, e.g., the yard, pound, quart, pint.	3	
Measurement		Use of imperial units in real life	19. Explain why metric and Imperial units are used in real life.		2.2 wk
Meas		Problem solving	20. Create and solve problems involving perimeter or area.		
		Perimeters of two- dimensional shapes	21. Calculate the perimeter of a two-dimensional shape.		
	Perimeter and		22. Identify appropriate units for the measurement of small and large areas.	8	
	Area	Development of the formula for finding the area of	23. Calculate the area of a rectangle or square by using the formula, Area = length x width.	0	
		a square or rectangle	24. Calculate the area of irregular figures that are comprised of squares, and/or rectangles.		
			25. Sketch squares, rectangles, or irregular figures with a given area and/or perimeter.		

### Section 7.3 Grade 5 — Term 3

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		The concepts of percent	35. Explain the concept of percent.		
		The use of	36. Represent a given percent using pictures/diagrams and symbols.		
		percents in everyday life Representation of	37. Explain the meaning of a given percent (e.g., 10% or 10 percent).		
	Percents	percents	38. Describe and analyse situations in real life that involve percents.	13	
		The relationship between fractions, decimals, and percents 40. Express a percent as a	39. Explain the relationship between fractions, decimals, and percents.		
oncept			40. Express a percent as a decimal or fraction.		0.5
Number Concepts			41. Express simple proper fractions and decimals as percents.		2.5 wk
Nun		Problem solv	Problem solving	42. Create, solve, and analyse problems involving fractions, decimals, and percents.	
		The use of Roman numerals in real life situations	43. Identify real life situations that involve the use of Roman numerals (e.g., the numbers on clocks and watches, numbering of chapters in a book).		
			44. State the Roman numerals for 1, 5, 10.		
	Roman Numerals	Numerele		4	
			46. Identify and write Roman numerals for numbers from 1 to 12.		

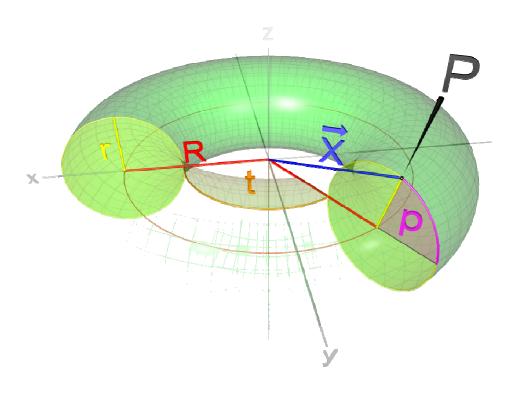
Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Problem solving	30. Create and solve problems involving addition, subtraction, and multiplication of decimal numbers.		
		The relationship between computation procedures for whole numbers and decimals	31. Explain how computation procedures for whole numbers can be applied to decimal numbers.		
	Decimals	Adding without and with regrouping	32. Add decimal numbers with up to two decimal places, without and with regrouping.	9	
tation		Subtraction without and with regrouping	33. Carry out subtraction involving decimal numbers with up to two decimal places, without and with regrouping.		2.5
Computation		Multiplication by a one-digit number	34. Multiply a decimal number with up to two decimal places by a one-digit number.		wk
		Problem solving	35. Create and solve problems involving percents.		
		Calculating	36. Calculate a percent of a number.	9	
	Percents	percents	37. Express one number as a percent of another.		
		of an article.	38. Calculate profit or loss, given the cost price and selling price of an article.		
		Profit and loss	39. Calculate profit or loss as a percent of the cost price of an article.		

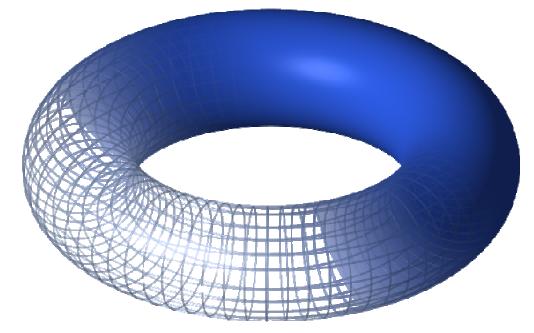
Stra nds	Topics	Sub Topics	Learning Outcomes	Less	sons
		Identifying information included in tables and graphs	18. Read data presented in tables, pictographs, bar graphs, and line graphs.		
Statistics	Data Interpretation	Answering questions based on the data	19. Interpret data presented in tables, pictographs, bar graphs, and line graphs.	7	1.0 wk
		represented in tables and graphs	20. Calculate the mean/average of a set of data.		
			21. Explain the concept of 'circumference of a circle'.		
		Parts of a circle	22. State the relationship between radii and diameter of circles.		
			23. Draw circles and identify the following parts: circumference, radius, diameter, centre.		
		Congruency	24. Identify two-dimensional shapes that have the same size and shape.		
			25. Explain the concept of 'congruent figures'.		
etry			26. Classify two-dimensional shapes using a variety of attributes: e.g., open, closed, symmetrical, congruent, the number and type of angles and sides, etc.		2.0
Geometry	Plane Shapes		27. Explain how various groups of persons (e.g., artists, craftpersons, and builders) use geometric concepts such as angles, symmetry, congruency, etc.	14	wk
			28. Create and solve problems involving plane shapes.		
			29. Describe a simple co-ordinate system with only positive numbers.		
		Introduction to co- ordinate systems	30. Plot points on a simple co-ordinate system with only positive numbers.		
		ordinale systems	31. Identify points on a simple co-ordinate system.		
			32. Create and solve problems involving simple co-ordinate systems.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons	
		Use of the 12-hour and 24-hour clock	26. Tell and write time using the 12-hour and 24-hour clock.			
	Time	Use of analog and digital clocks	27. Represent time on an analog or digital clock.	4	4	
		Problem solving	28. Create and solve problems involving duration of an event, time between events, starting time, finishing time, and relationships between units of time.			
		Problem solving	29. Create and solve problems involving money.			
			30. Read and write amounts of money up to \$99999			
ent		Representing	31. Describe situations that involve the use of large amounts (thousands) money.			
Measurement	amounts of money 32. Describe the role of cheques in transactions involving money.			2.0 wk		
			33. Represent amounts of money in a variety of ways.			
	Money		34. Calculate the total cost of a set of items, given the cost of one item and/or the cost of multiples of items.	10		
		Calculations involving money	35. Make up bills.			
			36. Calculate change.			
		Introduction to the concepts of cost price, selling price, profit, and loss	37. Explain the concepts of cost price, selling price, profit, loss, and discount.			
			38. Use the concepts of cost price, selling price, profit, loss, and discount in descriptions of situations involving buying and selling.			

# Chapter 8

# Grade 6 $\ll$ Annual Plan $\gg$





#### Section 8.1 Grade 6 — Term 1

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Problem solving	1. Create and solve problems involving number concepts.		
Number Concepts 1	General	paper, or calculators) to investigate nu	<ol> <li>Use appropriate strategies (mental computation, pencil and paper, or calculators) to investigate number concepts and solve problems.</li> </ol>	3	
		investigating number concepts	<ol> <li>Explain the strategies and procedures they used in carrying out investigations and solving problems involving number concepts.</li> </ol>		0.8 wk
	Counting		<ol> <li>Count in a variety of ways up to a given number, e.g., counting backward, skip counting, counting on.</li> </ol>	3	
		Sequences of numbers	5. Complete sequences of numbers.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			<ol><li>Identify the place value and total value or the digits in whole numbers with up to seven digits.</li></ol>		
		Place value Expanded notation	7. Read the numerals for whole numbers with up to seven digits.		
		Representation of numbers	8. Write numbers with up to seven digits in words and numerals.		
			9. Write numbers with up to digits in expanded notation.		
		Ordering numbers	10. Arrange a set of whole numbers in order of magnitude.		
		Rounding off numbers	11. Round off whole numbers to the nearest ten, hundred, or thousand.		
ts 2			12. Describe situations (e.g., government projects) that involve the use of very large (e.g., a million) numbers.		
Number Concepts		13. Compare two numbers using verbal number phrases such as: 'more than', 'less than', 'twice', 'thrice', 'twice more than', 'as much as', etc.	17	2.5 wk	
Nun			14. Explain the meaning of verbal number phrases such as 'more than', 'less than', 'twice', 'thrice', 'twice more than', 'as much as', etc. as used in given situations.		
			15. Classify numbers in a variety of ways, using number concepts such as square, prime, composite, odd, even, factors, multiples, etc.		
		Types of numbers	16. List the factors of numbers up to 100.		
		Factors, multiples	17. Prime-factorise composite numbers up to 100.		
			18. Calculate the highest common factor of two or three numbers.		
			19. Generate multiples of whole numbers.		
		H.C.F. and L.C.M	20. Calculate the lowest common multiple of two or three numbers, using listing of multiples or prime factorisation.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Computation- related vocabulary 1. Use computation vocabulary (e.g., sum, product, total, to describe situations that involve addition, subtraction, multiplication, or division.			
		Relationships among the four basic operations	<ol> <li>Explain the relationships that exist among addition, subtraction, multiplication, or division.</li> </ol>		
			3. Analyse computation situations to determine if an estimate or exact answer is required.		
			4. Explain the likely effects of an operation.		
			5. Estimate the answer to a computation.		
	General		6. Determine the reasonableness of an estimated or exact answer to a computation, and justify their conclusion.	6	
		Checking answers Computation	7. Explain mental computation strategies that may be used in calculations involving addition, subtraction, multiplication or division.		
u		strategies 8. Explain pencil and paper computation procedures that me be used in calculations involving addition, subtraction, multiplication or division. 9. Explain how to use the calculator to carry out addition, subtraction, multiplication or division.	•		
Computation					2.7 wk
S			10. Select an appropriate computation strategy (mental computation, use of pencil and paper, or use of a calculator) to carry out addition, subtraction, multiplication, or division.		
		Problem solving	11. Create and solve problems involving addition, subtraction, multiplication, and/or division of whole numbers.		
		Basic facts	12. Recall the basic facts for addition, subtraction, multiplication, and division of whole numbers.		
		Addition without and with regrouping	13. Add sets of whole numbers, without and with regrouping.		
	Whole Numbers	Subtraction without and with regrouping	14. Carry out subtraction involving whole numbers, without and with regrouping.	13	
		Multiplication by one- and two-digit numbers	15. Multiply whole numbers by one- and two-digit numbers.		
		Division by one- and two-digit numbers	16. Divide whole numbers by one- and two-digit numbers, without and with remainder		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons	
	General	Problem solving	1. Create and solve problems whose solutions require data collection, representation, and interpretation.	2		
cs		Use of observation, interviews, and questionnaires	<ol> <li>Describe procedures for collecting data through observation, interview, and the use of questionnaires.</li> </ol>			
Statistics	Data Collection	Selection of data collection methods	<ol> <li>Select appropriate means (observation, interview, questionnaire) of collecting data for a particular problem situation and give reasons for their selection.</li> </ol>	8	1.5 wk	
			4. Plan data collection activities.			
		Planning for data collection	5. Collect data through observation, interviews, or the use of questionnaires.			
			1. Describe three-dimensional shapes in terms of the number and type of faces, and the number of vertices and edges.			
		Attributes of three- dimensional shapes	2. Identify cubes, cuboids, cylinders, cones, and spheres by name.			
			3. Classify three-dimensional shapes in a variety of ways, e.g., according to the shape of their faces, the number of edges, etc.			
				<ol> <li>Select and use their own criteria to classify three-dimensional shapes.</li> </ol>		
netry	Three		5. Explain the criteria they used to classify three-dimensional shapes.			
Geome	Dimensional Shapes	Drawing three- dimensional shapes	<ol><li>Draw sketches of three-dimensional shapes from different perspectives, e.g., looking down on the shape, looking at it at eye level.</li></ol>	14	2.0 wk	
		Drawing and making nets of	7. Draw and make nets of cubes, cuboids, cylinders, and cones.			
		cubes, cuboids, cylinders, and cones	8. Identify the nets that will form cubes, cuboids, cylinders, and cones.			
			Constructing cubes, cuboids, cylinders, cones, and spheres	9. Construct cubes, cuboids, cylinders, cones, and spheres.		
		Use of three- dimensional shapes in real life	10. Identify three-dimensional shapes that would be appropriate for performing given functions in real life, e.g., storing toys.			

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
			1. Select the most appropriate unit to estimate and measure a length, the mass, or the capacity of a given object and give reasons for their choice of unit.		
		Selection of units and instruments	<ol> <li>Select the most appropriate instrument to measure a length, the mass, or the capacity of a given object and give reasons for their choice of instrument.</li> </ol>		
	General		<ol> <li>Explain how to use instruments for measuring length, mass, capacity, and temperature.</li> </ol>	5	
		Recording measurements	<ol> <li>Record estimates and measurements of length, mass, capacity, and temperature using appropriate notation.</li> </ol>		
		Converting from one unit to another	5. Use the relationships among the units to carry out simple conversions involving units of measure of the same attribute.		
-		Problem solving	6. Create and solve problems involving linear measurement.		
Measurement 1		Use of the kilometre, metre, centimetre as units easurement of measure	<ol> <li>Estimate and measure the lengths and heights of objects using the metre, centimetre, and/or millimetre as the units of measure.</li> </ol>	6	2.2 wk
Z	Linear Measurement		<ol> <li>Estimate and measure distances using the metre and/or centimetre as the units of measure.</li> </ol>		
			<ol> <li>Estimate and describe distances using the kilometre as the unit of measure.</li> </ol>		
		Scale drawings	10. Use simple scale drawings to determine actual distances.		
			11. Represent actual distances using scale drawings.		
		Problem solving	12. Create and solve problems involving measurement of mass.		
	Mass	Use of the tonne, kilogram, gram,	13. Estimate and measure the mass of objects using the kilogram, gram, and/or, milligram as the units of measure.	5	
		and milligram as units of measure 14. Use the tonne as	14. Use the tonne as a unit of measure to describe the mass of large or very heavy objects.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	Capacity	Use of the litre, centilitre, and millilitre as units of measure	15. Estimate and measure the capacity of containers using the litre, centilitre, and/or millilitre as the units of measure.	3	
		Problem solving	16. Create and solve problems involving measurement of capacity.		
Measurement 2	Imperial Unit	Relationships between imperial units and metric units	17. State the relationship between metric units of length, mass, and capacity and common units. (E.g., A metre is a little more than a yard. 1 Kg is approximately 2.2lbs., 1 teaspoon is approximately 5 ml.).	3	1.3 wk
Mea			18. Describe situations where they may be able to use the relationships between Imperial and metric units of measurement.		
	Temperature	Use of the Fahrenheit and Celsius scales	19. Read temperatures using the Fahrenheit and Celsius scales.	3	
			20. Compare temperatures using the Celsius and Fahrenheit scales. (E.g., the freezing point of water is 0 degrees Celsius but 32 degrees Fahrenheit.)		

## Section 8.2 Grade 6 — Term 2

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Representation of fractions	21. Represent fractions using diagrams/pictures and numerals.		
			22. Identify that are equivalent		
		Equivalent	23. Generate fractions that are equivalent to a given fraction.		
		fractions	24. Express proper fractions in their lowest terms.		
	Fractions		25. Convert an improper fraction to a mixed number and a mixed number to an improper fraction.	9	
		Oudening freetings	26. Arrange a set of fractions with like denominators in order of magnitude.		
epts		Ordering fractions	27. Arrange a set of fractions with unlike but related denominates in order of magnitude.		
Number Concepts		Lowest common denominator	28. Calculate the lowest common denominator of two or three fractions.		2.5 wk
Num		Place value	29. Identify the place value and total value of the digits in decimal numbers with up to two decimal places.	   	
		Representation of decimal numbers	30. Write and read decimal numbers with up to two decimal places.		
		Rounding off 31. Round off decimal numbers with up to two decimal place decimal numbers the nearest whole number, tenth, or to 1 decimal place.	31. Round off decimal numbers with up to two decimal places to the nearest whole number, tenth, or to 1 decimal place.		
	Decimals	Equivalent decimals	32. Identify decimals that represent the same quantity, e.g., 1.6 and 1.60.	9	
		Use of the relationship between fractions and decimals	33. Write a decimal number as a fraction and a fraction as a decimal number.		
		Ordering decimals	34. Arrange a set of decimals in order of magnitude.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Addition of proper	17. Create and solve problems involving addition, subtraction, and/or multiplication of fractions.		
			18. Add proper fractions with like or unlike but related denominators.		
		fractions	19. Add a proper fraction to a whole number.		
		Addition of mixed	20. Add a proper fraction to a mixed number.		
		numbers	21. Add two mixed numbers.		
		Subtraction of	22. Subtract proper fractions with like or unlike but related denominators.		
	Fractions	proper fractions Subtraction of	23. Subtract a proper fraction from a mixed number with like or unlike but related denominators, without and with regrouping.	12	
		mixed numbers Multiplication by whole numbers and proper fractions Multiplication of mixed numbers Division by whole numbers	24. Subtract a mixed number from a mixed number with like or unlike but related denominators, without and with regrouping.		
			25. Multiply proper and mixed fractions by whole numbers.		
ttion			26. Multiply proper fractions.		
Computation			27. Multiply a mixed number by a proper fraction.		3.0 wk
Cor			28. Multiply two mixed numbers.		
			29. Divide a proper fraction by a whole number.		
			30. Divide a mixed number by a whole number.		
	Decimals	Problem solving	31. Create and solve problems involving addition, subtraction, and/or multiplication of decimal numbers.		
		Addition without and with regrouping 32. Add decimal numbers with up to two decimal places, wit	32. Add decimal numbers with up to two decimal places, without and with regrouping.	9	
		Subtraction without and with regrouping	33. Subtract decimal numbers with up to two decimal places, without and with regrouping.		
		Multiplication by a one- or two-digit a one- or two-digit number with up to two decimal places a one- or two-digit whole number.	34. Multiply a decimal number with up to two decimal places by a one- or two-digit whole number.		
		Division by a one- or two-digit number	35. Divide a decimal number with up to two decimal places by a one- or two- digit whole number.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	Data Representation	Selection of appropriate methods of data representation	<ol> <li>Select appropriate methods (table, pictograph, bar graph, or line graph) to represent data, and give reasons for their selection.</li> </ol>	7	
Statistics		Selection of appropriate scales	7. Select appropriate scales for representing data in pictographs, bar graphs, and line graphs and give reasons for their choice scale.		1.0 wk
		Drawing tables and graphs	8. Represent data using tables, pictographs, bar graphs, or line graphs.		
		Attributes of two- dimensional shapes	11. Describe two-dimensional shapes in terms of the number and type of sides and angles.		
		Classification of two-dimensional shapes	12. Classify two-dimensional shapes in a variety of ways using geometric concepts such as symmetry, congruency, closed figures, perpendicular lines, parallel lines, as well as the number and type of sides and angles.		
			13. Select and use their own criteria to classify two-dimensional shapes.		
try			14. Explain the criteria that they used to classify two- dimensional shapes.		
Geometry	Plane Shapes	Drawing two- dimensional shapes	15. Draw two-dimensional shapes according to directions that are based on geometric concepts and the properties of the shapes, e.g., symmetry, type of figure (open or closed), the number of sides type of sides (parallel or perpendicular), etc.	10	1.5 wk
			16. Identify triangles squares, rectangles, and circles.		
		rectangles, triangles, and	17. Describe the attributes of the following geometric shapes: triangle, square, rectangle, and circle.		
		Classification of triangles	18. Sort and name triangles according to the length of their sides and the size of their angles (e.g., isosceles, equilateral, and acute angled triangles).		
			19. Describe the characteristics of each group/type of triangles.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Use of the 12-hour and 24-hour clock	21. Tell time using the 12-hour and 24-hour clock.		
		Time notation	22. Record and read measurements of time using a variety of time notations		
		Problem solving	23. Create and solve problems involving time: e.g., intervals of time, duration of events, starting and finishing times of events.		
	Time		24. Explain the concept of average speed.	6	
		Introduction to average speed	25. Explain the relationships that exist among distance, average speed, and time, e.g., average speed x travel time = the distance travelled.		
		Problem solving	26. Create and solve problems involving distance, speed, and time.		
nent			27. Calculate the perimeter of two-dimensional shapes.		
Measurement			28. Calculate the area of squares and rectangles using appropriate formulae.		2.0 wk
		Perimeter of two- dimensional shapes	29. Calculate the area of irregular figures that are comprised of squares, and/or rectangles.		
	Perimeter and	Area of right- angled triangles, squares and	30. Calculate the length of a side of a square or rectangle given appropriate information (e.g., the area and/or perimeter, lengths of sides).	8	
	Area	rectangles Area of irregular shapes	31. State the relationship between the area of a rectangle and the area of a triangle.	0	
			32. Calculate the area of right-angled triangles using the formula, Area = 1/2 base x perpendicular height.		
			33. Sketch squares, rectangles, triangles or irregular figures with a given area and/or perimeter.		
		Problem solving	34. Create and solve problems involving perimeter and/or area.		

# Section 8.3 Grade 6 — Term 3

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
	Percents	The concept of percent	35. Explain the concept of percent.	6	
		Use of percents in real life	36. Explain the meaning of percents, including percents larger than 100%, given a real life situation e.g., profit or increase in bank accounts.		
		Representation of percents as	37. Represent a percent as a fraction or decimal.		
		fractions and decimals	38. Represent simple fractions and decimals as percents.		
		Vocabulary related to ratio	39. Use appropriate vocabulary in descriptions of situations involving ratios, e.g., per, for each, for every, etc.		
epts	Ratio	The concept of ratio	40. Explain the concept of ratio.	7	
Number Concepts		Representation of ratio	41. Represent a ratio using objects, pictures/diagrams, and numerals.		2.5 wk
Nun		The relationship between ratio and fractions,	42. Explain the relationship that exists among ratio, percents, fractions, and decimals.		
		decimals, and percents	43. Express a ratio as a fraction.		
	Roman Numerals	Use of Roman numerals in real life	44. Identify real life situations that involve the use of Roman numerals (e.g., the numbers on clocks and watches, numbering of chapters in a book, the information at the end of a movie indicationg the year in which it was made).		
			45. Identify and write Roman numerals for numbers from 1 to 20.	4	
		Representation of Roman numerals 46. State the Roman numeral correspon	46. State the Roman numeral corresponding to 1000.		
			47. Write the current year in Roman numerals.		

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons	
			Problem solving	36. Create and solve problems involving percents, cost price, selling price, profit and loss.		
		Calculations of	37. Calculate a given percent of a number.	10		
		percents	38. Express one number as a percent of another.			
	Percents	and the profit or loss as an amount of money or as a pe	39. Calculate the selling price of an article, given the cost price and the profit or loss as an amount of money or as a percent.			
Computation		Profit and loss as	40. Calculate the cost price of an article given the selling price and the profit or loss as an amount of money only.		2.0 wk	
Cor		a percent 41. Calculate profit or loss given the cost price and selling pric of an article. 42. Express profit, loss, and discounts as a percent of the cost price.	41. Calculate profit or loss given the cost price and selling price of an article.			
	Ratio	Sharing in a given ratio	43. Share a quantity in a given ratio.	4		
		Problem solving	44. Create and solve problems involving ratio.			
		Reading data presented in tables and graphs	9. Read and interpret data presented in tables, pictographs, bar graphs, and line graphs.			
		Calculating the	10. Explain the concepts of mean and mode.	  13		
		mean/average				
Statistics	Data Interpretation	Identifying the mode	12. Identify the mode of a set of data.		1.8 wk	
		Interpreting values of the mean and mode				
		Answering questions based on the presented data	14. Make inferences from the data presented in tables and graphs.			

Stra nds	Topics	Sub Topics	Learning Outcomes	Les	sons
		Points, line segments	20. Represent and label a point.		
			21. Draw and label angles.		
			22. Identify and label angles.		
У		Types of angles	23. State the number of degrees associated with a right angle.		
Geometry	Plane Shapes		24. Identify acute angles and obtuse angles.	12	1.7 wk
G			25. Explain the concepts of 'acute angle' and 'obtuse angle'.		
			26. Plot points on a co-ordinate system.		
		Simple co-ordinate systems	27. Identify points on a co-ordinate system.		
			28. Identify and describe examples of geometric ideas that are used in everyday life.		
	Money	Representation of amounts of money	35. Write and read amounts of money up to the millions.		
			36. Describe situations that involve large amounts of money.		
		Use of money in	37. Read and interpret the rates of exchange for common foreign currencies (e.g., US dollar, pound sterling, Barbados dollar).	10	
ent		Foreign currency	38. Convert foreign currencies to Eastern Caribbean currency.		
Measurement			39. Convert Eastern Caribbean currency to foreign currency.	-1	2.0 wk
Mea		Problem solving	40. Create and solve problems involving money, e.g., total cost of items, determining change.		
	Angles	Use of protractor	41. Explain how to use a protractor to measure and draw angles.		
		Drawing angles	42. Draw angles of a given size.	4	
		Estimating and measuring the size of angels	43. Estimate and measure the size of angles.		