Daily	**50 min**	**50 min**	**50 min**	**50 min**	**50 min**	**50 min**				
Weekly							**4 hours**	**4 hours**	**4 hours**	**4 hours**

GRADE 1

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 1- FIRST QUARTER						
Numbers and Number Sense	demonstrates understanding of whole numbers up to 100, ordinal numbers up to $10^{th,}$ money up to PhP100 and fractions ½ and 1/4.	1. is able to recognize, represent, and order whole numbers up to 100 and money up to PhP100 in various forms and contexts. 2. is able to recognize, and represent ordinal numbers up to 10^{th}, in various forms and contexts.	1. visualizes and represents numbers from 0 to 100 using a variety of materials.	**M1NS-Ia-1.1**	1. BEAM LG Gr.1 Module 2- Sets of Whole Numbers 2. Lesson Guide in Elem. Math Grade 1 p. 70 3. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 70-76, 84-87	
			2. counts the number of objects in a given set by ones and tens.	**M1NS-Ib-2.1**	1. Lesson Guide in Elem. Math Grade 1. pp. 49, 54, 73, 84 2. Elementary Mathematics Grade 1. 2003. pp. 72-74* 3. Lesson Guide in Elementary Mathematics Grade 1. 2012. p. 100	
			3. identifies the number that is one more or one less from a given number.	**M1NS-Ib-3**	1. Proded Math. 2A, 2B & 2C: Putting Sets in Order 2. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 32-40 3. Elementary Mathematics Grade 1. 2003. p. 79*	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					4. Proded Math. I-A & I-B: More or Less	
			4. composes and decomposes a given number. e.g. 5 is 5 and 0, 4 and 1, 3 and 2, 2 and 3, 1 and 4, 0 and 5.	**M1NS-Ic-4**	Elementary Mathematics Grade 1. 2003. p. 39*	
			5. regroups sets of ones into sets of tens and sets of tens into hundreds using objects.	**M1NS- Id-5**	1. BEAM LG Gr.1 Module 2- Reading and Writing of Whole Numbers 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 96-99	Beads, Ø16mm
			6. visualizes, represents, and compares two sets using the expressions "less than," "more than," and "as many as."	**M1NS-Id- 6**	1. BEAM LG Gr.1 Module 2- Sets of Whole Numbers 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 40-48 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 40-48, 67-70 4. Proded Math. 5A, 5B, and 5C: Comparing Numbers 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 40-48, 67-70 6. Elementary Mathematics Grade 1. 2003. pp. 9-11* 7. Proded Math. I-B & I-C: Comparing Numbers	Cuisenaire Rods/Number Sticks, 250 pcs/set
			7. visualizes, represents, and orders sets from least to	**M1NS-Ie-7**	1. BEAM LG Gr.1 Module 2- Sets of Whole Numbers	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			greatest and vice versa.		2. Lesson Guide in Elem. Math Grade 1 p. 40 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 23-32 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 23-27, 27-32 5. Proded Math. IA, IB and IC: Putting Sets in Order 6. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 23-32 7. Proded Math. I-A, I-B & I-C: Putting Sets In Order	
			8. visualizes and counts by 2s, 5s and 10s through 100.	**M1NS-Ie-8.1**	1. BEAM LG Gr.1 Module 2- Reading and Writing of Whole Numbers 2. Lesson Guide in Elem. Math Grade 1 pp. 76, 79, 82 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 73-76, 76-78, 79-81, 81-84 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 76-84 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 76-84 6. Elementary Mathematics	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Grade 1. 2003. pp. 80-81*	
			9. reads and writes numbers up to 100 in symbols and in words.	**M1NS-If-9.1**	1. BEAM LG Gr.1 Module 2-Reading and Writing of Whole Numbers 2. Lesson Guide in Elem. Math Grade 1 pp. 90, 94 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 60-64, 87-94 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 62-67, 90-96 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 62-66, 90-96	
			10. visualizes and gives the place value and value of a digit in one- and two-digit numbers.	**M1NS-Ig-10.1**	1. BEAM LG Gr.1 Module 2-Reading and Writing of Whole Numbers 2. Lesson Guide in Elem. Math Grade 1 p. 88 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 84-87 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 88-90 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 88-90	Place Value Pocket Chart
			11. renames numbers into tens and ones.	**M1NS-Ig-11**	1. Lesson Guide in Elem. Math Grade 1 p. 97 2. Lesson Guide in	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Elementary Mathematics Grade 1. 2012. pp. 97-98; 101 3. Elementary Mathematic Grade 1. 2003. pp. 75-76*	
			12. visualizes, represents, and compares numbers up to 100 using relation symbols.	**M1NS-Ih-12.1**	1. Lesson Guide in Elem. Math Grade 1 p.67 2. Elementary Mathematics Grade 1. 2003. pp. 77-78*	
			13. visualizes, represents, and orders numbers up to 100 in increasing or decreasing order.	**M1NS-Ih-13.1**	1. Lesson Guide in Elem. Math Grade 1 p. 58 2. Proded Math. 3A, 3B and 3C: Ordering Numbers	
			14. identifies the 1st , 2nd, 3rd, up to 10th object in a given set from a given point of reference.	**M1NS-Ii-16.1**	1. BEAM LG Gr.1 Module 2- Reading and Writing of Whole Numbers 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 99-101 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 102-104 4. Elementary Mathematics. 2003. p. 82 5. Lesson Guide in Elementary Mathematics Grade 1. pp. 102-104	
			15. reads and writes ordinal numbers: 1st, 2nd, 3rd up to 10th.	**M1NS-Ii-17.1**	1. Lesson Guide in Elem. Math Grade 1 p. 104 2. Lesson Guides in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 1. 2005. pp. 101-103 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 104-106 4. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 104-106 5. Elementary Mathematics Grade 1. 2003. p. 83*	
			16. recognizes and compares coins and bills up to PhP100 and their notations.	**M1NS-Ij-19.1**	1. BEAM LG Gr.1 Module 2- Reading and Writing of Whole Numbers 2. Lesson Guide in Elem. Math Grade 1 p. 109 3. Elementary Mathematics Grade 1. 2003. p. 129* 4. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 112-116	
Grade 1- SECOND QUARTER						
Numbers and Number Sense	demonstrates understanding of addition and subtraction of whole numbers up to 100 including money	is able to apply addition and subtraction of whole numbers up to 100 including money in mathematical problems and real- life situations.	17. illustrates addition as "putting together or combining or joining sets"	**M1NS-IIa-23**	1. Lesson Guide in Elem. Math Grade 1 p. 123 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 116-120; 120-124 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 119-127 4. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 119-127	Plastic Chips, 60 pcs/set

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					5. Elementary Mathematics Grade 1. 2003. pp. 37-38*	
			18. visualizes and adds two one-digit numbers with sums up to 18 using the order and zero properties of addition.	**M1NS-IIa-26.1**	1. BEAM LG Gr.1 Module 4-Addition 2. Lesson Guide in Elem. Math Grade 1 pp. 135, 137 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 124-137 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 127-140 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 127-140 6. Proded Math. II-A: Add or Subtract?	
			19. adds two one-digit numbers using appropriate mental techniques e.g. adding doubles and/or near-doubles.	**M1NS-IIa-28.1a**	Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 147-148	
			20. visualizes and adds three one-digit numbers using the grouping property of addition.	**M1NS-IIb-26.2**	1. BEAM LG Gr.1 Module 4-Addition 2. Lesson Guide in Elem. Math Grade 1 p. 141 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 140-143 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 141-143 5. Lesson Guide in	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Elementary Mathematics Grade 1. 2012. pp. 141-147 6. Elementary Mathematics Grade 1. 2003. p. 62*	
			21. visualizes and adds two to three one-digit numbers horizontally and vertically.	**M1NS-IIb-27.1**	1. BEAM LG Gr.1 Module 4-Addition 2. Lesson Guide in Elem. Math Grade 1 p. 144 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 137-140 4. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 141-143; 149 5. Elementary Mathematics Grade 1. 2003. p. 63*	
			22. uses expanded form to explain the meaning of addition with regrouping.	**M1NS-IIc-27.2**	1. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 152-156 2. Elementary Mathematics Grade 1. 2003. p. 90*	
			23. visualizes and adds numbers with sums through 99 without or with regrouping.	**M1NS-IIc-27.3**	1. BEAM LG Gr.1 Module 4-Addition 2. Lesson Guide in Elem. Math Grade 1 pp. 149, 152 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 146-148; 149-152 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 149-152, 152-156	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 149-155 6. Elementary Mathematics Grade 1. 2003. p. 91* 7. Proded Math. II-A, II-B & II-C: Addition of Whole Numbers (Without Regrouping) 8. Proded Math. II-A: Addition of Whole Numbers (With Regrouping)	
			24. adds mentally two to three one- digit numbers with sums up to 18 using appropriate strategies.	**M1NS-IId-28.1b**	1. Lesson Guide in Elem. Math Grade 1 p. 147 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 143-145 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 147-149 4. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp.147	
			25. adds mentally two-digit numbers and one-digit numbers with regrouping using appropriate strategies.	**M1NS-IId-28.2**		
			26. visualizes and solves one-step routine and non-routine problems involving addition of whole numbers including money with sums up to 99 using appropriate problem	**M1NS-IIe-29.1**	1. BEAM LG Gr.1 Module 5-Application of Addition 2. Lesson Guide in Elem. Math Grade 1 p. 169 3. Lesson Guides in Elem. Math Grade 1. 2005. pp.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			solving strategies.		152-161, 171-177 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 156-162; 169-175 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 169-175 6. Proded Math. II-A & II-C: Add or Subtract?	
			27. creates situations involving addition of whole numbers including money .	**M1NS-IIe-30.1**	Elementary Mathematics Grade 1. 2003. p. 138*	
			28. illustrates subtraction as "taking away" or "comparing" elements of sets.	**M1NS-IIf-24**	1. BEAM LG Gr.1 Module 6-Subtraction 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 177-181 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 175-179 4. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 175-184 5. Elementary Mathematics Grade 1. 2003. p. 44*	Plastic Chips, 60 pcs/set
			29. illustrates that addition and subtraction are inverse operations.	**M1NS-IIf-25**	1. Lesson Guides in Elem. Math Grade 1. 2005. pp. 191-197 2. Lesson Guides in Elem. Math Grade 1. 2010. pp. 184-189 3. Lesson Guide in Elementary Mathematics	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Grade 1. 2012. pp.177-189 4. Elementary Mathematics Grade 1. 2003. p. 44*	
			30. visualizes, represents, and subtracts one-digit numbers with minuends through 18 (basic facts)	**M1NS-IIg-32.1**	1. BEAM LG Gr.1 Module 6-Subtraction 2. Lesson Guide in Elem. Math Grade 1 p. 190 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 197-201 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 190-193 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 190-193 6. Elementary Mathematics Grade 1. 2003. pp. 45-49; 57-61* 7. Proded Math. II-A & II-C: Add or Subtract?	
			31. visualizes, represents, and subtracts one- to two-digit numbers with minuends up to 99 without regrouping.	**M1NS-IIg-32.2**	1. BEAM LG Gr.1 Module 6-Subtraction 2. Lesson Guide in Elem. Math Grade 1 p. 194 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 201-204, 208-212 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 194-197, 201-205 5. Lesson Guide in Elementary Mathematics	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Grade 1. 2012. pp. 194-197, 201-205 6. Proded Math. II-A, 16-A & 16-B: Subtraction Without Regrouping	
			32. uses the expanded form to explain subtraction with regrouping.	**M1NS-IIh-32.3**	Elementary Mathematics Grade 1. 2003. pp. 92-93*	
			33. visualizes, represents, and subtracts one- to two-digit numbers with minuends up to 99 with regrouping.	**M1NS-IIh-32.4**	1. BEAM LG Gr.1 Module 6-Subtraction 2. Lesson Guide in Elem. Math Grade 1 p. 197 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 204-208; 213-216 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 197-201; 205-208 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 197-201; 205-208 6. Proded Math. 17-A & II-A: Subtraction With Regrouping	
			34. subtracts mentally one-digit numbers from two-digit minuends without regrouping using appropriate strategies.	**M1NS-IIi-33.1**	1. BEAM LG Gr.1 Module 6-Subtraction 2. Lesson Guide in Elem. Math Grade 1 p. 209 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 216-220 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 209-213	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 209-213	
			35. visualizes, represents, and solves routine and non-routine problems involving subtraction of whole numbers including money with minuends up to 99 with and without regrouping using appropriate problem solving strategies and tools.	**M1NS-IIi-34.1**	1. BEAM LG Gr.1 Module 7-Application of Subtraction 2. Lesson Guide in Elem. Math Grade 1 p. 235 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 220-231, 242-245 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 235-238 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 210, 213-224, 231-232, 234-235	
			36. creates situations involving subtraction of whole number including money.	**M1NS-IIj-35.1**	1. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 233, 236, 238 2. Elementary Mathematics Grade 1. 2003. p. 136*	
Grade 1- THIRD QUARTER						
			37. counts groups of equal quantity using concrete objects up to 50 and writes an equivalent expression. e.g. 2 groups of 5	**M1NS-IIIa-37**		1. Plastic Chips, 60 pcs/set 2. Square Units/Tiles, 2.54 x 2.54cm, plastic

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			38. visualizes, represents, and separates objects into groups of equal quantity using concrete objects up to 50. e.g. 10 grouped by 5s	**M1NS-IIIa-48**		Plastic Chips, 60 pcs/set
Numbers and Number Sense	demonstrates understanding of fractions ½ and 1/4.	is able to recognize, represent, and compare fractions ½ and 1/4 in various forms and contexts.	39. visualizes and identifies ½ and ¼ of a whole object.	**M1NS-IIIb-72.1**	1. Lesson Guide in Elem. Math Grade 1 pp. 239, 242 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 245-248, 249-252 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 239-246 4. Proded Math. 8A, 8B, and 8C: Halves and Fourths 5. Lesson Guide in Elem. Math Gr. 1. 2012. pp. 239-245 6. Elementary Mathematics Grade 1. 2003. pp. 102-103* 7. Proded Math. I-A, I-B & I-C: Halves and Fourths	Fraction Set
			40. visualizes, represents, and divides a whole into halves and fourths.	**M1NS-IIIc-73**	1. BEAM LG Gr.1 Module 8- Fractions 2. Lesson Guide in Elem. Math Grade 1 pp. 246, 249 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 252-264 4. Lesson Guides in Elem. Math Grade 1. 2010. pp.	Fraction Set

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					246-249; 249-253 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 246-253 6. Elementary Mathematics Grade 1. 2003. pp. 102-103* 7. Proded Math. I-A, I-B & I-C: Halves and Fourths	
			41. visualizes, and divides the elements of sets into two groups of equal quantities to show halves.	**M1NS-IIIc-74.1**	1. BEAM LG Gr.1 Module 8- Fractions 2. Lesson Guide in Elem. Math Grade 1 p. 254 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 264-268 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 254-258 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 254-258 6. Elementary Mathematics Grade 1. 2003. p. 107* 7. Proded Math. I-A, I-B & I-C: Halves and Fourths	1. Plastic Chips, 60 pcs/set 2. Square Units/Tiles, 10cm x 10cm, plastic
			42. visualizes, represents, and divides the elements of sets into four groups of equal quantities to show fourths	**M1NS-IIId-74.2**	1. BEAM LG Gr.1 Module 8- Fractions 2. Lesson Guide in Elem. Math Grade 1 p. 258 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 268-273	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 258-262 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 258-262 6. Elementary Mathematics Grade 1. 2003. p. 109* 7. Proded Math. I-A, I-B & I-C: Halves and Fourths	
			43. visualizes and draws the whole region or set given its ½ and/or ¼	**M1NS-IIId-75**	1. BEAM LG Gr.1 Module 8- Fractions 2. Lesson Guide in Elementary Mathematics Grade 1. 2012. p. 262	Fraction Set
Geometry	demonstrates understanding of 2-dimensional and 3-dimensional figures.	is able to describe, compare, and construct 2-dimensional and 3-dimensional objects	44. identifies, names, and describes the four basic shapes (square, rectangle, triangle and circle) in 2-dimensional (flat/plane) and 3-dimensional (solid) objects.	**M1GE-IIIe-1**	1. BEAM LG Gr.2 Module – Shapes 2. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 250-253 3. Elementary Mathematics Grade 1. 2003. pp. 117-118* 4. Proded Math. I-B & I-C: Comparing Shapes 5. BALS Video – Shapes and Figures Around Us	
			45. compares and classifies 2-dimensional (flat/plane) and 3-dimensional (solid) figures according to common attributes.	**M1GE-IIIe-2**	Elementary Mathematics Grade 1. 2003. pp. 119-120*	1. Basic 3-Dimensional Models 2. Pattern Blocks, 250 pcs/set

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			46. draws the four basic shapes.	**M1GE-IIIf-3**		
			47. constructs three dimensional objects (solid) using manipulative materials.	**M1GE-IIIf-4**		
Patterns and Algebra	demonstrates understanding of continuous and repeating patterns and mathematical sentences.	is able to apply knowledge of continuous and repeating patterns and number sentences in various situations.	48. determines the **missing term/s** in a given **continuous pattern** using **one attribute** (letters/ numbers/events). e.g. A,B,C,D,__ 2,3,__5,6,7 __,Wed, Thur, Fri Aa, Bb, Cb, __,___	**M1AL-IIIg-1**		
			49. determines the missing **term/s** in a given **repeating pattern** using one attribute(letters, numbers, colors, figures, sizes, etc.). e.g. A,B,C,A,B,C,A,__ ◊◊○○ ◊○○	**M1AL-IIIg-2**		
			50. constructs equivalent number expression using addition and subtraction. e.g. 6 + 5 = 12 - 1	**M1AL-IIIh-8**	Lesson Guide in Elem. Math Grade 1 p. 184	Number blocks

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			51. identifies and creates patterns to compose and decompose using addition. e.g. 7 = 0 + 7, 1 + 6, 2 + 5, 3 + 4, 4 + 3, 5 + 2, 6 + 1, 7 + 0	**M1AL-IIIi-9**	Lesson Guide in Elem. Math Grade 1 pp. 39 – 41; 57 – 63	
			52. visualizes and finds the missing number in an addition or subtraction sentence using a variety of ways e.g. n + 2 = 5 5 – n = 3	**M1AL-IIIj-10**	Elementary Mathematics Grade 1. 2003. pp. 41, 59-61*	
Grade 1- FOURTH QUARTER						
Measurement	demonstrates understanding of time and non-standard units of length, mass and capacity.	is able to apply knowledge of time and non-standard measures of length, mass, and capacity in mathematical problems and real-life situations	53. tells the days in a week; months in a year in the right order.	**M1ME-IVa-1**	1. BEAM LG Gr.1 Module 5-Measurement: Time Measure 2. Lesson Guide in Elem. Math Grade 1 pp. 262, 267 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 273-280 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 262-267; 267-270 5. Elementary Mathematics Grade 1. 2003. pp. 150-152* 6. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 262-270	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			54. determines the day or the month using a calendar.	**M1ME-IVa-2**	1. Lesson Guide in Elementary Mathematics Grade 1. 2012. p. 268, 270 2. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 270-276 3. Elementary Mathematics Grade 1. 2003. p. 149* 4. NFE Accreditation and Equivalency Learning Material. 2001. The Calendar. pp. 4-15	
			55. tells and writes time by hour, half-hour and quarter-hour using analog clock.	**M1ME-IVb-3**	1. Lesson Guide in Elem. Math Grade 1 pp. 270, 274, 281 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 281-284; 284-287; 291-293 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 270-273; 274-277; 281-283 4. Proded Math. 12A, 12B, 12C and 12D: Telling Time 5. Lesson Guide in Elementary Mathematics Grade 1. 2012. p. 270-277, 281-283	Demonstration Clock (Manipulative Clock, Blackboard)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			56. solves problems involving time (days in a week, months in a year, hour, half-hour, and quarter-hour)	**M1ME-IVb-4**	1. Lesson Guide in Elementary Mathematics Grade 1. 2012. p. 273 2. Elementary Mathematics Grade 1. 2003. p. 148*	
			57. compares objects using comparative words: short, shorter, shortest; long, longer, longest; heavy, heavier, heaviest; light, lighter, lightest.	**M1ME-IVc-19**	Elementary Mathematics Grade 1. 2003. pp. 3-8*	
			58. estimates and measures length using non- standard units of linear measures.	**M1ME-IVd-20**	1. BEAM LG Gr.1 Module 10- Linear Measure 2. Lesson Guide in Elem. Math Grade 1 p. 284 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 294-298 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 284-288 5. Proded Math. 10A, 10B and 10C: Linear Measure 6. Lesson Guide in Elem. Math Grade 1. 2012. p. 288-292 7. Elementary Mathematics Grade 1. 2003. pp. 161-166* 8. Proded Math. I-A, I-B & I-C: Linear Measure (Non-standard) 9. NFE Accreditation and Equivalency Learning Material. Measuring	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					Length. 2001.pp.4-9	
			59. estimates and measures mass using non-standard units of mass measure.	**M1ME-IVe-21**	1. BEAM LG Gr.1 Module 11- Mass Measure 2. Lesson Guide in Elem. Math Grade 1 p. 292 3. Lesson Guides in Elem. Math Grade 1. 2005. pp. 298-302 4. Lesson Guides in Elem. Math Grade 1. 2010. pp. 288-292 5. Lesson Guide in Elem. Math Gr. 1. 2012. pp. 288-289	1. Double-pan Balance, 500g 2. Set of Measuring cups and Spoons
			60. estimates and measures capacity using non-standard unit.	**M1ME-IVf-22**	1. Lesson Guide in Elem. Math Grade 1 p. 298 2. Lesson Guides in Elem. Math Grade 1. 2005. pp. 308-313 3. Lesson Guides in Elem. Math Grade 1. 2010. pp. 298-304 4. Lesson Guide in Elementary Mathematics Grade 1. 2012. pp. 292; 298-304	
Statistics and Probability	demonstrates understanding of pictographs without scales and outcomes of an event using the terms likely and unlikely to happen.	is able to create and interpret simple representations of data (tables and pictographs without scales) and describe outcomes of familiar events using the terms likely and unlikely to happen.	61. collects data on one variable through simple interview.	**M1SP-IVg-1.1**		
			62. sorts, classifies, and organizes data in tabular form and presents this into a pictograph without scales.	**M1SP-IVg-2.1**		
			63. infers and interprets data presented in a **pictograph without scales.**	**M1SP-IVh-3.1**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			e.g. finding out from the title what the pictograph is all about, comparing which has the least or greatest …			
			64. solves routine and non-routine problems using data presented in pictograph without scales.	**M1SP-IVh-4.1**		
			65. tells whether an event is likely or unlikely to happen.	**M1SP-IVi-7.1**		
			66. describe events in real-life situations using the phrases " likely" or "unlikely to happen". e.g. Tomorrow it will rain.	**M1SP-IVj-8.1**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 2- FIRST QUARTER						
Numbers and Number Sense	1. demonstrates understanding of whole numbers up to 1000, ordinal numbers up to 20th, and money up to PhP100. 2. demonstrates understanding of addition of whole numbers up to 1000 including money.	1. is able to recognize, represent, compare, and order whole numbers up to 1000, ordinal numbers up to 20th, and money up to PhP100 in various forms and contexts. 2. is able to recognize and represent ordinal numbers up to 20th in various forms and contexts. 3. is able to apply addition of whole numbers up to 1000 including money in mathematical problems and real-life situations.	1. visualizes and represents numbers from 0-1000 with emphasis on numbers 101 – 1 000 using a variety of materials.	**M2NS-Ia-1.2**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p. 1 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 1-10 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 1-5; 5-11 5. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 112	
			2. groups objects in ones, tens, and hundreds.	**M2NS-Ib-2.2**	1. Lesson Guide in Elementary Mathematics Grade 2. 2012. p. 4; 10 2. Mathematics for Everyday Life Grade 2. 1999. pp. 2-5* 3. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 13-15	Cuisenaire Rods/Number Sticks, 250 pcs/set
			3. gives the place value and finds the value of a digit in three-digit numbers.	**M2NS-Ib-10.2**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p.12	Place Value Pocket Chart

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 10-14 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 12-15 5. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 12-15 6. Mathematics for Everyday Life Grade 2. 1999. pp.20-21* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 24-26	
			4. visualizes and counts numbers by 10s, 50s, and 100s.	**M2NS-Ib-8.2**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p.24 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 23-27 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 24-28 5. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 24-27 6. Mathematics Kagamitan ng Magaaral Tagalog	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Grade 2. 2013. pp. 19-20	
			5. reads and writes numbers up to 1 000 in symbols and in words.	**M2NS-Ic-9.2**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p.15 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 14-17 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 15-18 5. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 15-18 6. Mathematics for Everyday Life Grade 2. 1999. pp. 6-7, 24-25* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 16-18; 21-23	
			6. visualizes and writes three-digit numbers in expanded form.	**M2NS-Ic-14**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p.18 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 17-20 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 18-21 5. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Math Grade 2. 2012. pp. 18-21 6. Mathematics for Everyday Life Grade 2. 1999. pp. 8-9* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 27-28	
			7. visualizes and compares numbers up to 1 000 using relation symbols.	**M2NS-Id-12.2**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p.21 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 20-23 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 21-24 5. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 21-24 6. Mathematics for Everyday Life Grade 2. 1999. pp. 10-11, 26-27* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 28-30	
			8. visualizes and orders numbers up to 1 000 in	**M2NS-Id-13.2**	1. Mathematics Kagamitan ng	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			increasing or decreasing order.		Magaaral Tagalog Grade 2. 2013. pp. 30-33 2. Proded Math. I-A, I-B & I-C: Ordering Numbers	
			9. identifies the 1st through the 20th with the emphasis on 11th to 20th object in a given set from a given point of reference.	**M2NS-Ie-16.2**	1. BEAM LG Gr. 2 Module 2- Presenting Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p.28 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 27-32 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 28-33 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 28-32 6. Mathematics Kagamitan ng Magaaral Tagalog Gr. 2. 2013. pp. 33-36 7. Proded Math. 4-A: Ordinal Numbers	
			10. reads and writes ordinal numbers from 1st through the 20th.	**M2NS-Ie-17.2**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 32-34 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 33-36 4. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Math Grade 2. 2012. pp. 33-35 5. Mathematics for Everyday Life Grade 2. 1999. p. 12* 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 36-40 7. Proded Math. 4-A: Ordinal Numbers	
			11. identifies and uses the pattern of naming ordinal numbers from 1st to the 20th.	**M2NS-Ie-18**	1. BEAM LG Gr. 2 Module 1- Whole Numbers 2. Lesson Guide in Elem. Math Grade 2 p.40 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 35-38 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 36-39 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 36-39 6. Mathematics for Everyday Life Grade 2. 1999. p. 13* 7. Proded Math. 4-B & 4-C: Ordinal Numbers	
			12. reads and writes money in symbols and in words through PhP100.	**M2NS-If-20.1**	1. BEAM LG Gr. 1 Module 1- Reading and Writing Whole Numbers 2. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Math Grade 2 p.42 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 41-43 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 42-45 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 42-44 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 176-182, 193-195	
			13. counts the value of a set of bills or a set of coins through PhP100 (peso-coins only; centavo-coins only; peso-bills only and combined peso-coins and peso-bills).	**M2NS-If-21**	1. BEAM LG Gr. 2 Module 3- Money 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 43-47 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 45-49 4. Lesson Guide in Elem. Math Grade 2. 2012. pp. 45-49 5. Mathematics for Everyday Life Grade 2. 1999. pp. 14, 28-29* 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 182-193	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			14. compares values of different denominations of coins and paper bills through PhP100 using relation symbols.	**M2NS-If-22.1**	1. BEAM LG Gr. 2 Module 3- Money 2. Lesson Guide in Elem. Math Grade 2 p.50 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 47-50 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 50-53 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 50-54 6. Mathematics for Everyday Life Grade 2. 1999. p. 15, 30* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013.195-196	
			15. illustrates the properties of addition (commutative, associative, identity) and applies each in appropriate and relevant situations.	**M2NS-Ig-26.3**	1. BEAM LG Gr. 2 Module 4- Addition 2. Lesson Guide in Elem. Math Grade 4 p.24 3. DLP Gr. 4 Modules 9, 10, 11; Gr. 5 Module 2 4. Lesson Guide in Elem. Math Grade 2. 2005. pp. 71-78 5. Lesson Guide in Elem. Math Grade 2. 2010. pp. 76-79; 79-83 6. Lesson Guide in Elem. Math Grade 2. 2012.	Plastic Chips, 60 pcs/set

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					pp. 76-82 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 47-54	
			16. visualizes, represents, and adds 2-digit by 3-digit numbers with sums up to 1000 without and with regrouping .	**M2NS-Ig-27.4**	1. BEAM LG Gr. 2 Module 4- Addition 2. Lesson Guide in Elem. Math Grade 2 p.59 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 56-60 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 59-63; 63-69 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 62-63; 69-72 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 40-44 7. Proded Math. II-A: Addition of Whole Numbers With Regrouping 8. Proded Math. II-A: Addition of Whole Numbers Without Regrouping	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			17. visualizes, represents, and adds 3-digit by 3-digit numbers with sums up to 1000 without and with regrouping.	**M2NS-Ih-27.5**	1. BEAM LG Gr. 2 Module 4- Addition 2. Lesson Guide in Elem. Math Grade 2 p.59 3. Proded Math. 13A, B and C: Addition of Whole Numbers (Without Regrouping) 4. Proded Math. 15A, B and C: Addition of Whole Numbers (With Regrouping) 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 59-83 6. Mathematics for Everyday Life Grade 2. 1999. pp. 36-37; 42-43* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 45-46 8. Proded Math. II-A: Addition of Whole Numbers With Regrouping 9. Proded Math. II-B: Addition of Whole Numbers Without Regrouping	
			18. adds mentally 1- to 2-digit numbers with sums up to 50 using appropriate	**M2NS-Ih-28.3**	1. BEAM LG Gr. 2 Module 4- Addition 2. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			strategies.		Math Grade 2 p.83 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 79-82 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 83-87 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 83-86 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 54-55	
			19. adds mentally 3-digit numbers and 1-digit numbers using appropriate strategies.	**M2NS-Ii-28.4**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 56-58	
			20. adds mentally three -digit numbers and tens (multiples of 10 up to 90) using appropriate strategies.	**M2NS-Ii-28.5**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 59-60	
			21. adds mentally 3-digit numbers and hundreds (multiples of 100 up to 900) using appropriate strategies.	**M2NS-Ii-28.6**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			22. solves routine and non-routine problems involving addition of whole numbers including money with sums up to 1000 using appropriate problem solving strategies and tools.	**M2NS-Ij-29.2**	1. BEAM LG Gr. 2 Module – Application of Addition 2. Lesson Guide in Elem. Math Grade 2 p.87 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 85-93 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 87-90; 90-92; 92-95; 95-99 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 87-99 6. Mathematics for Everyday Life Grade 2. 1999. pp. 48-52* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 61-69	
			23. creates problems involving addition of whole numbers including money.	**M2NS-Ij-30.2**		
Grade 2- SECOND QUARTER						
Numbers and Number Sense	demonstrates understanding of subtraction and multiplication of whole numbers up to 1000 including money.	is able to apply subtraction and multiplication of whole numbers up to 1000 including money in mathematical problems and real-life situations.	24. visualizes, represents, and subtracts 2- to 3-digit numbers with minuends up to 999 without and with regrouping.	**M2NS-IIa-32.5**	1. BEAM LG Gr. 2 Module 6- Subtraction 2. Lesson Guide in Elem. Math Grade 2 p.105 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 103-107 4. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Math Grade 2. 2010. pp. 105-112 5. Proded Math. 16A, 16B and 16C: Subtraction Without Regrouping 6. Proded Math. 17A, 17B and 17C: Subtraction With Regrouping 7. Lesson Guide in Elem. Math Grade 2. 2012. pp. 105-123 8. Mathematics for Eveyrday Life Grade 2. 1999. pp. 40-41; 44-45* 9. Mathematics for Everyday Use Grade 3. 1997. pp. 60-62* 10. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 69-71 11. Proded Math. II-A, II-B & II-C: Subtraction With Regrouping 12. Proded Math. 17-A, 17-B & 17-C: Subtraction With Regrouping 13. Proded Math. II-C: Subtraction Without	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Regrouping 14. Proded Math. 16-C: Subtraction Without Regrouping	
			25. subtracts mentally 1-digit numbers from 1- to 3-digit numbers without regrouping using appropriate strategies.	**M2NS-IIb-33.2**	1. BEAM LG Gr. 2 Module 6- Subtraction 2. LessonGuide in Elem. Math Grade 2 p.123 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 120-122 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 123-125 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 123-125 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 72-74	
			26. subtracts mentally 3-digit numbers by tens and by hundreds without regrouping using appropriate strategies.	**M2NS-IIb-33.3**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 75-78	
			27. solves routine and non-routine problems involving subtraction of whole numbers including money with minuends up to 1000 using appropriate problem solving strategies and tools.	**M2NS-IIc-34.2**	1. BEAM LG Gr. 2 Module – Application of Subtraction 2. Lesson Guide in Elem. Math Grade 2 p.126 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 122-125	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 126-128 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 126-128 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 78-82	
			28. creates problems involving subtraction of whole numbers including money.	**M2NS-IId-35.2**		
			29. performs orders of operations involving addition and subtractions of small numbers.	**M2NS-IId-34.3**	1. Lesson Guide in Elem. Math Grade 2. 2005. pp. 131-134 2. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 83-85	
			30. solves multi-step routine and non-routine problems involving addition and subtraction of 2- to 3-digit numbers including money using appropriate problem solving strategies and tools.	**M2NS-IIe-34.4**	1. BEAM LG Gr. 2 Module 8- Application of Addition and Subtraction 2. Lesson Guide in Elem. Math Grade 2. 2010. pp. 132-135; 136-139 3. Lesson Guide in Elem. Math Grade 2. 2012. pp. 132-139 4. Mathematics Kagamitan ng Magaaral Tagalog	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					Grade 2. 2013. pp. 85-96	
			31. creates word problems involving addition and subtraction of whole numbers including money.	**M2NS-IIe-35.3**		
			32. illustrates multiplication as repeated addition using 32.1 groups of equal quantities 32.2 arrays 32.3 counting by multiples 32.4 equal jumps on the number line	**M2NS-IIf-38**	1. Lesson Guide in Elem. Math Grade 2 p.140 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 139-143; 143-147 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 140-143; 143-148 4. Lesson Guide in Elem. Math Grade 2. 2012. pp. 140-141, 143-146 5. Mathematics for Everyday Life Grade 2. 1999. pp. 58-59* 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 97-103	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			33. writes a related equation for each type of multiplication: repeated addition, array, counting by multiples, and equal jumps on the number line.	**M2NS-IIf-39**	1. Lesson Guide in Elem. Math Grade 2 p.148 2. Lesson Guide in Elem. Math Grade 2. 2010. pp. 148-151 3. Lesson Guide in Elem. Math Grade 2. 2012. pp. 142-145; 147 4. Mathematics for Everyday Life Grade 2. 1999. pp. 60-61* 5. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 103-109	
			34. illustrates the property of multiplication that any number multiplied by one (1) is the same number.	**M2NS-IIg-40.1**	1. Lesson Guide in Elem. Math Grade 2 p.157 2. Lesson Guide in Elem. Math Grade 2. 2010. pp. 157-160 3. Lesson Guide in Elem. Math Grade 2. 2012. pp. 157-159 4. Mathematics for Everyday Life Grade 2. 1999. pp. 70-71* 5. Mathematics for Everyday Use Grade 3. 1997. pp. 93-95* 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 109-112	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			35. illustrates the property of multiplication that zero multiplied by any number is zero.	**M2NS-IIg-40.2**	1. Lesson Guide in Elem. Math Grade 2 p.160 2. DLP Gr. 4 Module 27 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 158-160 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 160-162 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 160-162 6. Mathematics for Everyday Life Grade 2. 1999. pp. 70-71* 7. Mathematics for Everyday Life Grade 2. 1997. pp. 93-95*	
			36. illustrates the commutative property of multiplication.	**M2NS-IIg-40.3**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 112-114	
			37. visualizes multiplication of numbers 1 to 10 by 2,3,4,5 and10.	**M2NS-IIh-41.1**	1. BEAM LG Gr. 2 Module – Multiplication 2. Mathematics for Everyday Life Grade 2. 1999. pp. 62-69* 3. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 114-117	
			38. multiplies mentally 2,3,4,5 and 10 using appropriate strategies.	**M2NS-IIi-42.1**	1. BEAM LG Gr. 2 Module – Multiplication 2. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Math Grade 2 p.166	
			39. solves routine and non-routine problems involving multiplication of whole numbers including money using appropriate problem solving strategies and tools.	**M2NS-IIi-45.1**	1. BEAM LG Gr. 2 Module – Multiplication 2. Lesson Guide in Elem. Math Grade 2 p.169 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 167-170; 173-176 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 169-172; 172-177 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 169-176 6. Mathematics for Everyday Life Grade 2. 1999. pp. 80-81* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 120-122	
			40. solves routine and non-routine problems involving multiplication and addition or subtraction of whole numbers including money using appropriate problem solving strategies and tools.	**M2NS-IIj-45.2**	1. Lesson Guide in Elem. Math Grade 2 p.177 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 176-180 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 177-180 4. Lesson Guide in Elem. Math Grade 2. 2012. pp. 177-180 5. Mathematics Kagamitan ng	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Magaaral Tagalog Grade 2. 2013. pp. 122-124	
			41. creates problems involving multiplication only and multiplication with addition or subtraction of whole numbers including money with reasonable answers.	**M2NS-IIj-46.1**		
Grade 2- THIRD QUARTER						
Numbers and Number Sense	1. demonstrates understanding of division of whole numbers up to 1000 including money. 2. demonstrates understanding of unit fractions.	1. is able to apply division of whole numbers up to 1000 including money in mathematical problems and real-life situations. 2. is able to recognize and represent unit fractions in various forms and contexts.	42. visualizes and represents division as equal sharing, repeated subtraction, equal jumps on the number line and using formation of equal groups of objects	**M2NS-IIIa-49**	1. BEAM LG Gr. 2 Module 11– Application of Division 2. Lesson Guide in Elem. Math Grade 2 p.181 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 180-183; 195-199 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 181-184 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 181-184 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 124-135	Beads, Ø16mm
			43. creates and writes a related equation for each type of situation: equal sharing, repeated subtraction, equal jumps on the number line,	**M2NS-IIIa-50**	1. DLP Gr. 3 Module 24 2. Mathematics for Everyday Life Gr. 2. 1999. pp. 86-89* 3. Mathematics	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			and formation of equal groups of objects.		Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 135-145	
			44. visualizes division of numbers up to 100 by 2,3,4,5, and 10 (multiplication table of 2, 3, 4, 5 and 10).	**M2NS-IIIb-51.1**	1. BEAM LG Gr. 2 Module 11– Application of Division 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 186-190 3. Mathematics for Everyday Life Grade 2. 1999. pp. 92-99* 4. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 145-147	
			45. divides mentally numbers by 2,3,4,5 and 10 using appropriate strategies (multiplication table of 2, 3, 4, 5 and 10).	**M2NS-IIIb-52.1**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 147-149	
			46. illustrates that multiplication and division are inverse operations.	**M2NS-IIIc-53**	1. DLP Gr. 3 Module 28 2. Lesson Guide in Elem. Math Grade 2 p.206 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 200-203 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 202-206 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 202-206	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					6. Mathematics for Everyday Life Grade 2. 1999. pp. 90-91	
			47. solves routine and non-routine problems involving division of numbers by 2,3,4,5 and 10 and with any of the other operations of whole numbers including money using appropriate problem solving strategies and tools.	**M2NS-IIIc-56.1**	1. BEAM LG Gr. 2 Module 11– Application of Division 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 211-214; 217-220; 220-223 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 215-218 4. Mathematics for Everyday Life Grade 2. 1999. pp. 104-106* 5. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 149-154	
			48. creates word problems involving division of whole numbers including money.	**M2NS-IIIc-57.1**		
			49. visualizes, represents and identifies unit fractions with denominators of 10 and below.	**M2NS-IIId-72.2**	1. BEAM LG Gr. 2 Module 13 – Fractions 2. Lesson Guide in Elem. Math Grade 2 p.231 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 230-239 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 231-235	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 231-240 6. Mathematics for Everyday Life Grade 2. 1999. pp. 110-117* 7. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 154-157	
			50. reads and writes unit fractions.	**M2NS-IIId-76.1**	1. Lesson Guide in Elem. Math Grade 2 p.240 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 239-244 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 240-245 4. Lesson Guide in Elem. Math Grade 2. 2012. pp. 240-245 5. Mathematics for Everyday Life Grade 2. 1999. pp. 110-117* 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 157-158	
			51. compares unit fractions using relation symbols.	**M2NS-IIIe-77.1**	1. Lesson Guide in Elem. Math Grade 2 p.245 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 244-248	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 245-249 4. Proded Math. 30A: Comparing Parts of a Whole 5. Proded Math. 30C: Comparing Fractions 6. Lesson Guide in Elem. Math Grade 2. 2012. pp. 245-249 7. Mathematics for Everyday Life Grade 2. 1999. pp. 120-121* 8. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 159-160 9. Proded Math. II-A: Comparing Parts of a Whole 10. Proded Math. II-B: Comparing Parts of a Set 11. Proded Math. II-C: Comparing Fractions	
			52. arranges unit fractions in increasing or decreasing order.	**M2NS-IIIe-78.1**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 160-162	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			53. identifies other fractions less than one with denominators 10 and below.	**M2NS-IIIe-79.1**	1. DLP Gr. 3 Module 35 2. Lesson Guide in Elem. Math Grade 3. 2012. pp. 293-298 3. Mathematics for Everyday Use Grade 3. 1997. pp. 162-165* 4. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 162-164	5.
			54. visualizes similar fractions (using group of objects and number line).	**M2NS-IIIf-72.3**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 165-167	Square Units/Tiles, 10cm x 10cm, plastic
			55. reads and writes similar fractions.	**M2NS-IIIf-76.2**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 168-172	
			56. compares similar fractions using relation symbols.	**M2NS-IIIf-77.2**	1. DLP Gr. 3 Module 36 2. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 172-173	
			57. arranges similar fractions in increasing or decreasing order.	**M2NS-IIIf-78.2**	1. Lesson Guide in Elem. Math Grade 4 p.205 2. MISOSA 4 – Ordering Similar Fractions 3. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 173-175	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
Geometry	demonstrates understanding of straight and curved lines, flat and curved surfaces, basic shapes, symmetry in a line, and tessellations using triangles and squares.	is able to recognize and construct straight and curved lines, flat and curved surfaces, basic shapes and create simple designs that show symmetry in a line and tessellation using triangles and squares.	58. visualizes, identifies, classifies and describes half circles and quarter circles.	**M2GE-IIIg-5**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 197-198	
			59. constructs squares, rectangles, triangles, circles, half-circles, and quarter circles using cut-outs and square grids.	**M2GE-IIIg-6**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 198-201	Compass, blackboard Geoboard, 11 x 11
			60. identifies shapes/figures that show symmetry in a line.	**M2GE-IIIh-7.1**	1. BEAM LG Gr. 2 Module Geometry – Tessellations 2. Lesson Guide in Elem. Math Grade 2 p.266 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 266-270 4. Elementary Mathematics Grade 1. 2003. pp. 122-123 5. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 266-269 6. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 201-204 7. Proded Math. 6-A: Describing Shapes	Compass, blackboard
			61. identifies and draws the line of symmetry in a given symmetrical figure.	**M2GE-IIIh-7.4a**	Proded Math. 6-B: Describing Shapes	Compass, blackboard

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			62. creates figures that show symmetry in a line.	**M2GE-IIIh-7.2**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 205-210	
			63. recognizes shapes that can tessellate.	**M2GE-IIIh-8.1**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 211-214	
			64. tessellates a surface using triangles and squares.	**M2GE-IIIi-8.2**	1. Lesson Guide in Elem. Math Grade 2 p.263 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 262-265 3. Lesson Guide in Elem. Math Grade 2. 2010. pp. 263-266 4. Lesson Guide in Elem. Math Grade 2. 2012. pp. 263-265	Pattern Blocks, 250 pcs/set
			65. identifies straight lines and curves, flat and curved surfaces in a 3-dimensional object. This is not reflected in the performance standards.	**M2GE-IIIi-9**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 217-219	
			66. explains the differences between straight lines and curved lines, flat surfaces and curved surfaces. This is not reflected in the performance standards.	**M2GE-IIIi-10**		Basic 3-Dimensional Models

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
Patterns and Algebra	demonstrates understanding of continuous patterns using two attributes and mathematical sentences involving multiplication and division of whole numbers using 2, 3, 4, 5 and 10 only.	is able to apply knowledge of continuous patterns using two attributes and number sentences involving multiplication and division using 2, 3, 4, 5 and 10 only in various situations.	67. determines the missing term/s in a given continuous pattern using two attributes (any two of the following: figures, numbers, colors, sizes, and orientations, etc.) e.g. 1, A, 2,B,3,C,__,__ 1, 2, 3, 4 __	**M2AL-IIIj-3**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 220-228	
			68. visualizes and finds the missing value in a number sentence involving multiplication or division of whole numbers using 2, 3, 4, 5 and 10 only. e.g. 5 x __ = 30 30 ÷ __ = 6	**M2AL-IIIj-11**		
Grade 2- FOURTH QUARTER						
Measurement	demonstrates understanding of time, standard measures of length, mass and capacity and area using square-tile units.	is able to apply knowledge of time, standard measures of length, weight, and capacity, and area using square-tile units in mathematical problems and real-life situations.	69. tells and writes time in minutes including a.m. and p.m. using analog and digital clocks.	**M2ME-IVa-5**	1. BEAM LG Gr. 2 Module 9 – Time Measure 2. Lesson Guide in Elem. Math Grade 2 p.285 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 284-286; 291-298 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 285-288 5. Lesson Guide in Elem. Math Grade 2. 2012.	Digital Clock, tabletop Demonstration Clock (Manipulative Clock, Blackboard)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					pp. 285-288 6. Mathematics for Everyday Life Grade 2. 1999. pp. 144-148* 7. Mathematics for Everyday Use Grade 3. 1997. pp. 196-197* 8. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 229-232	
			70. visualizes and finds the elapsed time in days.	**M2ME-IVa-6**		
			71. visualizes, represents, and solves problems involving time (minutes including a.m. and p.m. and elapsed time in days).	**M2ME-IVa-7**	1. BEAM LG Gr. 2 Module 9 – Time Measure 2. Lesson Guide in Elem. Math Grade 2 p.304 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 301-306 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 304-309 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 304-308 6. Mathematics for Everyday Life Grade 2. 1999. pp. 148-150* 7. Mathematics for Everyday Use Grade 3. 1997. pp. 198-199* 8. Mathematics Kagamitan ng	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Magaaral Tagalog Grade 2. 2013. pp. 234-240	
			72. shows and uses the appropriate unit of length and their abbreviation cm and m to measure a particular object.	**M2ME-IVb-23**	1. Mathematics for Everyday Life Grade 2. 1999. pp. 152-153* 2. Mathematics for Everyday Use Grade 3. 1997. pp. 200-202* 3. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 244-248 4. NFE Accreditation and Equivalency Learning Material. Measurement, Perimeter and Circumference. 2001. p.5	Plastic Ruler, 12 inches or 30cm
			73. compares length in meters or centimeters.	**M2ME-IVb-24**	1. Mathematics for Everyday Life Grade 2. 1999. p. 154* 2. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 249-251	
			74. measures objects using appropriate measuring tools in m or cm.	**M2ME-IVb-25**	1. Lesson Guide in Elem. Math Grade 2 p.309 2. Lesson Guide in Elem. Math Grade 2. 2005. pp. 309-313 3. Lesson Guide in Elem. Math Grade 2. 2010.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					pp. 309-312 4. Lesson Guide in Elem. Math Grade 2. 2012. pp. 309-312 5. NFE Accreditation and Equivalency Learning Material. Measuring Length. 2001. pp. 10-11	
			75. estimates and measures length using meter or centimeter.	**M2ME-IVc-26**	1. Lesson Guide in Elem. Math Grade 2 p.312 2. Lesson Guide in Elem. Math Grade 2. 2010. pp. 312-316 3. Lesson Guide in Elem. Math Grade 2. 2012. pp. 312-316 4. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 252-253	
			76. solves routine and non-routine problems involving length.	**M2ME-IVc-27**	1. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 254-255 2. NFE Accreditation and Equivalency Learning Material. Measurement, Perimeter and Circumference. 2001. pp. 6, 8-9	
			77. shows and uses the appropriate unit of weight	**M2ME-IVd-28**	1. Mathematics Kagamitan ng	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			and their abbreviations g and kg to measure a particular object.		Magaaral Tagalog Grade 2. 2013. pp. 256-257 2. NFE Accreditation and Equivalency Learning Material. Measuring Weight Part 1: The Metric & English Systems. 2001. pp. 5-12	
			78. compares mass in grams or kilograms.	**M2ME-IVd-29**	1. BEAM LG Gr. 2 Module 18 – Mass and Capacity 2. Mathematics for Everyday Life Grade 2. 1999. pp. 160-162* 3. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 258-260	
			79. measures objects using appropriate measuring units in g or kg.	**M2ME-IVd-30**	1. BEAM LG Gr. 2 Module 18 – Mass and Capacity 2. Lesson Guide in Elem. Math Grade 2 p.317 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 320-324 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 317-320 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 317-319	Weighing Scale, analog, max. 5 kg cap. Weighing Scale, analog, 1 kg. cap. Double-pan Balance, 500g

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			80. estimates and measures mass using gram or kilogram.	**M2ME-IVe-31**	1. BEAM LG Gr. 2 Module 18 – Mass and Capacity 2. Lesson Guide in Elem. Math Grade 2 p.323 3. Lesson Guide in Elem. Math Grade 2. 2005. pp. 313-316 4. Lesson Guide in Elem. Math Grade 2. 2010. pp. 323-327 5. Lesson Guide in Elem. Math Grade 2. 2012. pp. 323-327 6. Mathematics for Everyday Life Grade 2. 1999. p. 163* 7. Mathematics Kagamitan ng Magaaral Tagalog Gr. 2. 2013. pp. 261-263	8.
			81. solves routine and non-routine problems involving mass.	**M2ME-IVe-32**	1. Mathematics for Everyday Life Grade 2. 1999. pp. 164-165* 2. Mathematics for Everyday Use Grade 3. 1997. pp. 220-222* 3. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 264-266 4. NFE Accreditation and Equivalency Learning Material. Measuring	5.

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Weight Part 1: The Metric & English Systems. 2001. pp. 30-31, 49-51	
			82. measures objects using appropriate measuring tools in mL or L.	**M2ME-IVf-33**	1. Lesson Guide in Elem. Math Grade 2. 2005. pp. 336-340 2. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 340-343 3. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 279-280	1. Liter Volume Set (liter cases) 2. Measuring cup, 250mL, plastic 3. Set of Measuring cups and Spoons
			83. creates problems involving length, mass and capacity.	**M2ME-IVf-34**		
			84. illustrates area as a measure of how much surface is covered or occupied by a plane figure.	**M2ME-IVg-35**	1. BEAM LG Gr. 2 Module 12 – Area 2. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 331-335 3. Mathematics for Everyday Use Grade 3. 1997. p. 211* 4. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 267-270	Geoboard, 11 x 11

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			85. finds the area of a given figure using square-tile units i.e. number of square-tiles needed.	**M2ME-IVg-36**	1. Lesson Guide in Elem. Math Grade 2. 2005. pp. 332-336 2. Lesson Guide in Elementary Mathematics Grade 2. 2012. pp. 335-340 3. Mathematics for Everyday Use Grade 3. 1997. pp. 212-213* 4. Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 271-273	
			86. estimates the area of a given figure using any shape.	**M2ME-IVh-37**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 273-278	
			87. solves routine and non-routine problems involving any figure using square tiles.	**M2ME-IVh-38**	Mathematics for Everyday Use Grade 3. 1997. pp. 214-216*	Square Units/Tiles, 2.54 x 2.54cm, plastic
Statistics and Probability	deepens understanding of pictographs without and with scales and outcomes of an event using the terms likely, equally likely and unlikely to happen.	is able to create and interpret simple representations of data (tables and pictographs without and with scales) and describe outcomes of familiar	88. collects data on one variable using a questionnaire.	**M2SP-IVh-1.2**	Mathematics for Everyday Use Grade 3. 1997. pp. 232-234*	
			89. sorts, classifies, and organizes data in tabular form and presents this into a pictograph without and with scales.	**M2SP-IVi-2.2**	Mathematics Kagamitan ng Magaaral Tagalog Grade 2. 2013. pp. 281-284	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
		events using the terms likely, equally likely and unlikely to happen.	90. infers and interprets data presented in a pictograph without and with scales.	**M2SP-IVi-3.2**	1. BEAM LG Gr. 3 Module 15 – Pictograph 2. Mathematics Kagamitan ng Magaaral Tagalog Gr. 2. 2013. pp. 286	
			91. solves routine and non-routine problems using data presented in a pictograph without and with scales.	**M2SP-IVi-4.2**		
			92. tells whether an event is likely, equally likely, unlikely to happen.	**M2SP-IVj-7.2**		
			93. describe events in real-life situations using the phrases " likely to happen" or "unlikely to happen" or "equally likely to happen".	**M2SP-IVj-8.2**		

K to 12 BASIC EDUCATION CURRICULUM

GRADE 3

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 3- FIRST QUARTER						
Numbers and Number Sense	1. demonstrates understanding of whole numbers up to 10 000, ordinal numbers up to 100^{th}, and money up to PhP1000. 2. demonstrates understanding of addition and subtraction of whole numbers including money	1. is able to recognize, represent, compare, and order whole numbers up to 10 000, and money up to PhP1000 in various forms and contexts. 2. is able to recognize and represent, ordinal numbers up to 100^{th} in various forms and contexts. 3. is able to apply addition and subtraction of whole numbers including money in mathematical problems and real-life situations.	1. visualizes numbers up to 10 000 with emphasis on numbers 1001 - 10000.	**M3NS-Ia-1.3**	1. Lesson Guide in Elem. Math 3 pp. 1 – 14 2. BEAM LG Gr. 3 Module 1.1 – Whole Numbers 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 1-10 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 1-10 5. Lesson Guide in Elem. Math Grade 3. 2012. pp. 1-10	
			2. gives the place value and value of a digit in 4- to 5-digit numbers.	**M3NS-Ia-10.3**	1. Lesson Guide in Elem. Math 3 pp. 15 – 17 2. BEAM LG Gr. 3 Module 1.1 – Whole Numbers 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 15-19 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 15-18 6. Mathematics for Everyday Use Grade 3. 1997. pp. 11-13 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 15-18	Cuisenaire Rods/Number Sticks, 250 pcs/set

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
			3. reads and writes numbers up to 10 000 in symbols and in words.	**M3NS-Ia-9.3**	1. Lesson Guide in Elem. Math 3 pp. 18 - 27 2. BEAM LG Gr. 3 Module 1.1 – Whole Numbers 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 19-28 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 18-23; 23-28 6. Mathematics for Everyday Use Grade 3. 1997. pp. 2-7* 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 1-10	
			4. rounds numbers to the nearest ten, hundred and thousand..	**M3NS-Ib-15.1**	1. Lesson Guide in Elem. Math 3 pp. 37 – 40 2. BEAM LG Gr. 3 Module 1.2 – Whole Numbers 3. DLP Gr. 4 Module 5 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 37-44 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 37-44 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 37-44 8. Mathematics for Everyday Life Grade 4.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2000. pp. 10-13* 9. NFE Accreditation and Equivalency Learning Material. Estimation. 2001. pp. 4-7	
			5. compares numbers up to 10 000 using relation symbols.	**M3NS-Ib-12.3**	1. BEAM LG Gr. 3 Module 1.1 – Whole Numbers 2. MTB-MLE Group – Teacher's Guide 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 28-33 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 28-33 5. Mathematics for Everyday Use Grade 3. 1997. pp. 14-18*	
			6. orders 4- to 5-digit numbers in increasing or decreasing order.	**M3NS-Ib-13.3**	MTB-MLE Group – Teacher's Guide	
			7. identifies ordinal numbers from 1st to 100th with emphasis on the 21st to 100th object in a given set from a given point of reference.	**M3NS-Ic-16.3**	1. MTB-MLE Group – Teacher's Guide 2. Mathematics for Everyday Life Grade 4. 2000. pp. 12-13	
			8. recognizes coins and bills up to PhP1 000.	**M3NS-Ic-19.2**		
			9. reads and writes money in symbols and in words through PhP1 000 in pesos and centavos.	**M3NS-Ic-20.2**	1. Lesson Guide in Elem. Math 3 pp.49 – 51 2. BEAM LG Gr. 3 Module 1.3 – Whole Numbers 3. DLP Gr. 3 Module 8, Gr. 4 Module 48 4. MTB-MLE Group –	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 49-52 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 49-52 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 49-52	
			10. compares values of the different denominations of coins and bills through PhP1 000 using relation symbols.	**M3NS-Id-22.2**	1. Lesson Guide in Elem. Math 3 pp.52 – 56 2. BEAM LG Gr. 3 Module 1.3 – Whole Numbers 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 52-56 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 52-57 6. Mathematics for Everyday Use Grade 3. 1997. pp. 22-25* 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 52-57*****	
			11. adds 3- to 4-digit numbers up to three addends with sums up to 10 000 without and with regrouping.	**M3NS-Id-27.6**	1. Lesson Guide in Elem. Math 3 pp.70 – 80 2. DLP Gr. 3 Module 12, 13 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 69-72	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 70-73 6. Proded Mathematics. 14A: Finding Sums Without Regrouping 7. Mathematics for Everyday Use Grade 3. 1997. pp. 32-35*	
			12. estimates the sum of 3- to 4-digit addends with reasonable results.	**M3NS-Ie-31**	1. LG in Elem. Math 3 pp.81 – 84 2. DLP Gr. 3 Module 14 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 80-84 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 81-85 6. Mathematics for Everyday Life Gr. 4. 2000. pp. 14-17*	
			13. adds mentally 2-digit and 1-digit numbers without or with regrouping using appropriate strategies.	**M3NS-Ie-28.7**	1. Lesson Guide in Elem. Math 3 pp.85 – 90 2. DLP Gr. 3 Module 15 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 84-88 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 85-90 6. Mathematics for Everyday Use Grade 3.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					1997. pp. 51-53* 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 85-90	
			14. adds mentally 2- to 3-digit numbers with multiples of hundreds using appropriate strategies.	**M3NS-Ie-28.8**	1. LG in Elem. Math 4 pp.35 – 36 2. MTB-MLE Group – Teacher's Guide 3. Grade School Mathematics Grade 4. 2003. pp. 32-33 4. Mathematics for Everyday Life Grade 4. 2000. pp. 28-29*	
			15. solves routine and non-routine problems involving addition of whole numbers with sums up to 10 000 including money using appropriate problem solving strategies and tools.	**M3NS-If-29.3**	1. Lesson Guide in Elem. Math 3 pp.95 – 99 2. DLP Gr. 3 Module 16 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 92-98 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 95-100 6. Misosa Grade 4 Mod. 10 7. Mathematics for Everyday Use Grade 3. 1997. pp. 54-59* 8. Grade School Mathematics Grade 4. 2003. pp. 34-35 9. Lesson Guide in Elem. Math Grade 3. 2012. pp. 95-100 10. Mathematics for	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Everyday Life Grade 4. 2000. pp. 40-41*	
			16. creates problems involving addition of whole numbers including money.	**M3NS-If-30.3**		
			17. subtracts 3-to 4-digit numbers from 3- to 4-digit numbers without and with regrouping.	**M3NS-Ig-32.6**	1. Lesson Guide in Elem. Math 3 pp.100 – 144 2. BEAM LG Gr. 3 Module 1 – Subtraction 3. DLP Gr. 3 Module 17, 18 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 98-142 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 100-144 7. Mathematics for Everyday Use Grade 3. 1997. pp. 60-62* 8. Grade School Mathematics Grade 4. 2003. pp. 38-39	
			18. estimates the difference of two numbers with three to four digits with reasonable results.	**M3NS-Ih-36**	1. Lesson Guide in Elem. Math 3 pp.145 – 148 2. BEAM LG Gr. 3 Module 1 – Subtraction 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 142-146 5. Lesson Guide in Elem. Math Grade 3. 2010. pp.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					145-149 6. Grade School Mathematics Grade 4. 2003. pp. 40-41* 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 145-149 8. Mathematics for Everyday Life Grade 4. 2000. pp. 36-37*	
			19. subtracts mentally 1- to 2 – digits numbers without and with regrouping using appropriate strategies.	**M3NS-Ih-33.5**	1. Lesson Guide in Elem. Math 3 pp.149 – 154 2. BEAM LG Gr. 3 Module 1 – Subtraction 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 146-151 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 149-154 6. Mathematics for Everyday Use Grade 3. 1997. pp. 78-79 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 149-154 8. Mathematics for Everyday Life Grade 4. 2000. pp. 38-39*	
			20. subtracts mentally 2- to 3 – digits numbers with multiples of hundreds without and with regrouping using appropriate strategies.	**M3NS-Ii-33.6**	1. MTB-MLE Group – Teacher's Guide 2. Grade School Mathematics Grade 4. 2003. pp. 42-43*	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			21. solves routine and non-routine problems involving subtraction without or with addition of whole numbers including money using appropriate problem solving strategies and tools.	**M3NS-Ii-34.5**	1. Lesson Guide in Elem. Math 3 pp.155 – 169 2. BEAM LG Gr. 3 Module 2 – Application of Subtraction, Module 3 – Application of Addition and Subtraction 3. DLP Gr. 3 Module 19, Gr. 4 Module 19 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 152-158; 163-167 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 155-161; 165-169 7. Mathematics for Everyday Use Grade 3. 1997. pp. 81-82* 8. Lesson Guide in Elem. Math Grade 3. 2012. pp. 155-161 9. Mathematics for Everyday Life Grade 4. 2000. pp. 42-43*	
			22. creates problems involving addition and/or subtraction of whole numbers including money.	**M3NS-Ij-35.4**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 3- SECOND QUARTER						
Numbers and Number Sense	demonstrates understanding of multiplication and division of whole numbers including money.	is able to apply multiplication and division of whole numbers including money in mathematical problems and real-life situations	23. visualizes multiplication of numbers 1 to 10 by 6,7,8 and 9.	**M3NS-IIa-41.2**	1. BEAM LG Gr.2 Module – Multiplication 2. MTB-MLE Group – Teacher's Guide 3. Mathematics for Everyday Life Grade 2. 1999. pp.72-77*	
			24. visualizes and states basic multiplication facts for numbers up to 10.	**M3NS-IIa-41.3**	MTB-MLE Group – Teacher's Guide	
			25. applies the commutative property of multiplication.	**M3NS-IIb-40.4**	1. Lesson Guide in Elem. Math 3 pp.170 – 174 2. DLP Gr. 5 Module 3 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 167-172 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 170-175 6. Lesson Guide in Elem. Math Grade 3. 2012. pp. 170-175	
			26. multiplies 2-digit by 1-digit numbers using the distributive property of multiplication.	**M3NS-IIb-40.5**	1. DLP Gr. 4 Module 29 2. MTB-MLE Group – Teacher's Guide	
			27. multiplies three 1-digit numbers using the associative property of multiplication.	**M3NS-IIb-40.6**	1. DLP Gr. 4 Module 26, Gr. 5 Module 3 2. MTB-MLE Group – Teacher's Guide	
			28. multiplies 2- to 3-digit numbers by 1-digit numbers	**M3NS-IIc-43.1**	1. Lesson Guide in Elem. Math 3 pp.185 – 193	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			without or with regrouping.		2. MTB-MLE Group – Teacher's Guide 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 172-177; 188-181 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 175-180; 180-184 5. Mathematics for Everyday Use Grade 3. 1997. pp.88-89* 6. Mathematics for Everyday Life Grade 4. 2000. pp. 54-57* 7. Proded Math. III-A, III-B & III-C: Multiplying Whole Numbers Without Regrouping 8. Proded Math. III-A & III-B: Multiplying Whole Numbers With Regrouping	
			29. multiplies 2-digit numbers by 2-digit numbers without regrouping.	**M3NS-IIc-43.2**	1. MTB-MLE Group – Teacher's Guide 2. Mathematics for Everyday Use Grade 3. 1997. pp. 96-98*	
			30. multiplies 2-digit number by 2-digit numbers with regrouping.	**M3NS-IIc-43.3**	1. MTB-MLE Group – Teacher's Guide 2. Mathematics for Everyday Use Grade 3. 1997. pp. 104-106*	
			31. multiplies 2- to 3-digit numbers by multiples of 10 and 100.	**M3NS-IId-43.4**	1. Lesson Guide in Elem. Math 3 pp.194 – 203 2. MTB-MLE Group –	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Teacher's Guide 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 191-196; 196-201 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 194-199; 199-203 5. Mathematics for Everyday Use Grade 3. 1997. pp. 110-111* 6. Grade School Mathematics Grade 4. 2003. pp. 66-67 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 194-203 8. Mathematics for Everyday Life Gr. 4. 2000. pp. 52-53*	
			32. multiplies 1- to 2-digit numbers by 1 000.	**M3NS-IId-43.5**	MTB-MLE Group – Teacher's Guide	
			33. estimates the product of 2- to 3-digit numbers and 1- to 2-digit numbers with reasonable results .	**M3NS-IId-44.1**	1. MTB-MLE Group – Teacher's Guide 2. Lesson Guide in Elem. Math Grade 3. 2005. pp. 201-205 3. Lesson Guide in Elem. Math Grade 3. 2010. pp. 208-211 4. Lesson Guide in Elem. Math Grade 3. 2012. pp. 204-208 5. Mathematics for Everyday Life Grade 4. 2000. pp. 62-63*	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			34. multiplies mentally 2-digit by 1-digit numbers without regrouping with products of up to 100.	**M3NS-IIe-42.2**	1. Lesson Guide in Elem. Math 3 pp.212 – 215 2. MTB-MLE Group – Teacher's Guide 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 209-213 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 212-216 5. Mathematics for Everyday Use Grade 3. 1997. pp. 116-117 6. Grade School Mathematics Grade 4. 2003. pp. 70-71 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 212-216 8. Mathematics for Everyday Life Grade 4. 2000.pp. 64-65*	
			35. solves routine and non-routine problems involving multiplication without or with addition and subtraction of whole numbers including money using appropriate problem solving strategies and tools.	**M3NS-IIe-45.3**	1. Lesson Guide in Elem. Math 3 pp.216 – 222 2. MTB-MLE Group – Teacher's Guide 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 214-217; 217-220 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 216-223 5. Mathematics for Everyday Use Grade 3. 1997. pp. 122-125* 6. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 3. 2012. pp. 216-223 7. Mathematics for Everyday Life Grade 4. 2000. pp. 66-71*	
			36. creates problems involving multiplication or with addition or subtraction of whole numbers including money.	**M3NS-IIf-46.2**		
			37. visualizes and states the multiples of 1- to 2-digit numbers.	**M3NS-IIf-47**	MTB-MLE Group – Teacher's Guide	
			38. visualizes division of numbers up to 100 by 6,7,8,and 9 (multiplication table of 6, 7, 8, and 9).	**M3NS-IIg-51.2**	1. BEAM LG Gr.2 Module 11 – Division 2. MTB-MLE Group – Teacher's Guide	
			39. visualizes and states basic division facts of numbers up to 10.	**M3NS-IIg-51.3**	1. BEAM LG Gr.2 Module 11 – Division 2. MTB-MLE Group – Teacher's Guide	
			40. divides 2- to 3-digit numbers by 1- to 2- digit numbers without and with remainder.	**M3NS-IIh-54.1**	1. Lesson Guide in Elem. Math 3 pp.229 – 236 2. DLP Gr. 3 Module 29 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 226-231; 240-246 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 229-236 6. Proded Mathematics. 26A, B & C: Division of Whole Numbers Without Remainder	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					7. Proded Mathematics. 27A: Finding the Quotients Without Remainders 8. Proded Mathematics. 28A & B: Division of Whole Numbers With Remainder 9. Proded Mathematics. 29A & 29B: Finding Quotients With Remainders 10. Mathematics for Everyday Use Grade 3. 1997. pp. 129-134; 139-147* 11. Lesson Guide in Elem. Math Grade 3. 2012. pp. 229-242 12. Mathematics for Everyday Life Grade 4. 2000. pp. 72-85* 13. Proded Math. III-A, III-B & III-C: Division of Whole Numbers (Without Remainder) 14. Proded Math. III-A, III-B & III-C: Division of Whole Numbers (With Remainder) 15. Proded Math. 27-A: Finding the Quotients Without Remainder 16. Proded Math. 29-A & 29-B: Finding Quotients With Remainders	
			41. divides 2-3 digit numbers by 10 and 100 without or with remainder.	**M3NS-IIh-54.2**	1. Lesson Guide in Elem. Math 3 pp.270 – 275 2. BEAM LG Gr.3 Module-	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					Application of Division 3. DLP Gr. 3 Module 32 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 268-274 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 237-242; 270-276 7. Mathematics for Everyday Use Gr. 3. 1997. pp. 136-138* 8. Lesson Guide in Elem. Math Grade 3. 2012. pp. 270-276 9. Mathematics for Everyday Life Grade 4. 2000. pp. 86-87*	
			42. estimates the quotient of 2- to 3- digit numbers by 1- to 2- digit numbers.	**M3NS-IIi-55.1**	1. MTB-MLE Group – Teacher's Guide 2. Lesson Guide in Elem. Math Grade 3. 2005. pp. 240-246	
			43. divides mentally 2-digit numbers by 1-digit numbers without remainder using appropriate strategies.	**M3NS-IIi-52.2**	1. Lesson Guide in Elem. Math 3 pp.276 – 280 2. DLP Gr. 3 Module 39 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 276-280 5. Mathematics for Everyday Use Grade 3. 1997. pp. 148-150* 6. Grade School	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 4. 2003. pp. 92-93* 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 276-280 8. Mathematics for Everyday Life Grade 4. 2000. pp. 88-89*	
			44. solves routine and non-routine problems involving division of 2- to 4-digit numbers by 1- to 2-digit numbers without or with any of the other operations of whole numbers including money using appropriate problem solving strategies and tools.	**M3NS-IIj-56.2**	1. Lesson Guide in Elem. Math 3 pp.281 – 292 2. BEAM LG Gr.2 Module 11 – Division, Gr.3 Module – Application of Division 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 278-282; 283-286; 287-291 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 281-293 6. Mathematics for Everyday Use Grade 3. 1997. pp. 151-153* 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 281-293 8. Mathematics for Everyday Life Grade 4. 2000.pp. 90-94*	
			45. creates problems involving division or with any of the other operations of whole numbers including money.	**M3NS-IIj-57.2**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 3- THIRD QUARTER						
Numbers and Number Sense	demonstrates understanding of proper and improper, similar and dissimilar and equivalent fractions.	is able to recognize and represent proper and improper, similar and dissimilar and equivalent fractions in various forms and contexts.	46. identifies odd and even numbers.	**M3NS-IIIa-63**	1. Lesson Guide in Elem. Math 3 pp.44 – 48, Gr. 5 p. 27 2. DLP Gr. 3 Module 7 3. BEAM LG Gr.3 Module 1.2 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 44-49 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 44-49 7. Mathematics for Everyday Use Grade 3. 1997. pp. 19-21* 8. Lesson Guide in Elem. Math Grade 3. 2012. pp. 44-49	
			47. visualizes and represents fractions that are equal to one and greater than one.	**M3NS-IIIa-72.4**	1. Lesson Guide in Elem. Math 3 pp.305 – 311 2. DLP Gr. 3 Module 37 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 306-310 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 305-309; 309-312 6. Mathematics for Everyday Use Grade 3. 1997. p. 167* 7. Grade School	

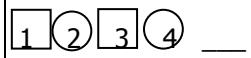
CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 4. 2003. pp. 104-105 8. Lesson Guide in Elem. Math Grade 3. 2012. pp. 305-312 9. Mathematics for Everyday Life Grade 4. 2000. pp. 104-105*	
			48. reads and writes fractions that are equal to one and greater than one in symbols and in words.	**M3NS-IIIb-76.3**	1. BEAM LG Gr.3 Module 1- Identify and Order Fractions 2. MTB-MLE Group – Teacher's Guide 3. Mathematics for Everyday Use Grade 3. 1997. pp.168-169* 4. Lesson Guide in Elem. Math Grade 3. 2012. pp. 305-312 5. Mathematics for Everyday Life Grade 4. 2000. pp. 104-105*	
			49. represents fractions using regions, sets, and the number line.	**M3NS-IIIb-72.5**	1. Lesson Guide in Elem. Math 4 p.188 2. BEAM LG Gr.6 Module 22 3. Lesson Guide in Elem. Math Grade 3. 2012. pp. 188-192	Beads, Ø16mm
			50. visualizes and represents dissimilar fractions.	**M3NS-IIIc-72.6**	1. DLP Gr. 4 Module 58, 59 2. Lesson Guide in Elem. Math 4 p.197 3. MTB-MLE Group – Teacher's Guide 4. MISOSA Grade 4 Module	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					35 5. Lesson Guide in Elem. Math Grade 3. 2012. pp. 197-200 6. Mathematics for Everyday Life Grade 4. 2000. pp.96-97*	
			51. visualizes, represents, and compares dissimilar fractions.	**M3NS-IIId-77.3**	1. MISOSA Module Gr.6 – Comparing Fractions 2. MTB-MLE Group – Teacher's Guide 3. Proded Mathematics.30A: Comparing Parts of a Whole, 30B: Comparing Parts of a Set & 30C: Comparing Parts of Fractions 4. MISOSA Grade 4 Module 35 5. Mathematics for Everyday Use Gr. 3. 1997. pp. 170-175* 6. Grade School Mathematics Grade 4. 2003. pp. 106-109*	
			52. visualizes, represents, and arranges dissimilar fractions in increasing or decreasing order.	**M3NS-IIId-78.3**	1. BEAM LG Gr.5 Module 2, Gr.6 Module 29 2. MISOSA Gr. 5 Module – Ordering Dissimilar Fractions 3. MTB-MLE Group – Teacher's Guide 4. Mathematics for Everyday Use Grade 3. 1997. pp. 170-175* 5. Grade School	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					Mathematics Grade 4. 2003. pp. 108-109* 6. NFE Accreditation and Equivalency Learning Material. Learning About Fractions. 1998. pp. 10-14	
			53. visualizes and generates equivalent fractions.	**M3NS-IIIe-72.7**	1. Lesson Guide in Elem. Math 5 p.63 2. BEAM LG Gr.5 Module 2 3. MISOSA Gr. 5 and 6 Modules – Equal/Equivalent Fractions 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2012. pp. 63-68 6. NFE Accreditation and Equivalency Learning Material. Learning About Fractions. 1998. pp. 6-9	
Geometry	demonstrates understanding of lines, symmetrical designs, and tessellation using square, triangle and other shapes that can tessellate.	is able to recognize and represent lines in real objects and designs or drawings, complete symmetrical designs, and create patterns of designs using square, triangle and other shapes that can tessellate.	54. recognizes and draws a point, line, line segment and ray.	**M3GE-IIIe-11**	1. MTB-MLE Group – Teacher's Guide 2. Grade School Mathematics Grade 4. 2003. pp. 172-174* 3. Mathematics for Everyday Life Grade 4. 2000. pp. 162-163* 4. BALS Video – Shapes and Figures Around Us	
			55. recognizes and draws parallel, intersecting and perpendicular lines.	**M3GE-IIIf-12.1**	1. Lesson Guide in Elem. Math 3 pp.330 – 337 2. DLP Gr. 3 Module 42	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					3. BEAM LG Gr.3 Module 7 – Line and Line Segment 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 327-335 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 330-338 7. Grade School Mathematics Grade 4. 2003. pp. 175-176 8. Lesson Guide in Elem. Math Grade 3. 2012. pp. 330-338 9. Mathematics for Everyday Life Grade 4. 2000. pp. 164-165*	
			56. visualizes, identifies and draws congruent line segments.	**M3GE-IIIf-13**	1. Lesson Guide in Elem. Math 3 pp.338 – 344 2. DLP Gr. 3 Module 43 3. BEAM LG Gr.3 Module 7 – Line and Line Segment 4. MTB-MLE Group – Teacher's Guide 5. Lesson Guide in Elem. Math Grade 3. 2005. pp. 335-338; 338-341 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 338-345 7. Grade School Mathematics Grade 4. 2003. pp. 177-179* 8. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					Math Grade 3. 2012. pp. 338-345 9. Mathematics for Everyday Life Grade 4. 2000. pp. 166-167*	
			57. identifies and visualizes symmetry in the environment and in design.	**M3GE-IIIg-7.3**	1. DLP Gr. 3 Module 44 2. BEAM LG Gr.3 Module 7 – Line and Line Segment 3. MTB-MLE Group – Teacher's Guide	
			58. identifies and draws the line of symmetry in a given symmetrical figure.	**M3GE-IIIg-7.4**	MTB-MLE Group – Teacher's Guide	
			59. completes a symmetric figure with respect to a given line of symmetry.	**M3GE-IIIh-7.5**	1. Lesson Guide in Elem. Math 3 pp.357 – 362 2. BEAM LG Gr.3 Module 7 – Line and Line Segment 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 353-359 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 357-363 6. Lesson Guide in Elem. Math Grade 3. 2012. pp. 357-363	
			60. tessellates the plane using triangles, squares and other shapes that can tessellate.	**M3GE-IIIh-8.3**	1. Lesson Guide in Elem. Math 3 pp. 345 – 356 2. MTB-MLE Group – Teacher's Guide	Pattern Blocks, 250 pcs/set
Patterns and Algebra	demonstrates understanding of continuous and	is able to apply knowledge of continuous and	61. determines the **missing term/s** in a given combination of **continuous**	**M3AL-IIIi-4**	MTB-MLE Group – Teacher's Guide	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
	repeating patterns and mathematical sentences involving multiplication and division of whole numbers.	repeating patterns and number sentences involving multiplication or division of whole numbers in various situations.	**and repeating pattern.** e.g. 4A,5B, 6A,7B,__ 			
			62. finds the missing value in a number sentence involving multiplication or division of whole numbers. e.g. n x 7 = 56 56 ÷ n = 8	**M3AL-IIIj-12**		
Grade 3- FOURTH QUARTER						
Measurement	demonstrates understanding of conversion of time, linear, mass and capacity measures and area of square and rectangle.	is able to apply knowledge of conversion of time, linear, mass and capacity measures and area of rectangle and square in mathematical problems and real-life situations.	63. visualizes, and represents, and converts time measure from seconds to minutes, minutes to hours, and hours to a day and vice versa.	**M3ME-IVa-8**	1. Lesson Guide in Elem. Math 3 pp.368 – 372 2. MTB-MLE Group – Teacher's Guide 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 364-368 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 368-372 5. Lesson Guide in Elem. Math Grade 3. 2012. pp. 368-372 6. NFE Accreditation and Equivalency Learning Material. 2001. Oras. pp. 12-13	Digital Clock, tabletop Demonstration Clock (Manipulative Clock, Blackboard)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			64. visualizes, and represents, and converts time measure 64.1 days to week, month and year and vice versa 64.2 weeks to months and year and vice versa 64.3 months to year and vice versa.	**M3ME-IVa-9**	1. Lesson Guide in Elem. Math 3 pp.363 – 367 2. BEAM LG Gr.2 Module 9-Time Measure, Gr. 3 Module 8 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 359-364 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 363-368 6. Lesson Guide in Elem. Math Grade 3. 2012. pp. 363-368 7. Mathematics for Everyday Life Gr. 4. 2000. pp. 198-199*	
			65. visualizes, and represents, and solves problems involving conversion of time measure.	**M3ME-IVb-10**	1. Lesson Guide in Elem. Math 3 pp.376 – 379 2. BEAM LG Gr.3 Module 8 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 372-376 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 376-380 6. Lesson Guide in Elem. Math Grade 3. 2012. pp. 371-372 7. NFE Accreditation and Equivalency Learning Material. 2001. Time. pp.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner...	The learner...	The learner...			
					13, 17-18 8. NFE Accreditation and Equivalency Learning Material. Oras. 2001. pp. 13-14, 19	
			66. visualizes, and represents, and converts common units of measure from larger to smaller unit and vice versa: meter and centimeter, kilogram and gram, liter and milliliter.	**M3ME-IVb-39**	1. DLP Gr. 3 Module 45 2. BEAM LG Gr.3 Module 1 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 410-413 5. Mathematics for Everyday Use Grade 3. 1997. p. 219* 6. Mathematics for Everyday Life Grade 4. 2000. pp. 188-189* 7. NFE Accreditation and Equivalency Learning Material. Measuring Length. 2001. pp. 14-15 8. NFE Accreditation and Equivalency Learning Material. Measuring Weight Part 1: The Metric & English Systems. 2001. pp. 18-25 9. NFE Accreditation and Equivalency Learning Material. Perimeter and Areas. 1998. pp. 11-22	Plastic Ruler, 12 inches or 30cm Double-pan Balance, 500g
			67. visualizes, and represents, and solves routine and non-routine problems involving conversions of common	**M3ME-IVc-40**	1. BEAM LG Gr.3 Module 2 – Capacity 2. Lesson Guide in Elem. Math Grade 3. 2010. pp.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			units of measure.		413-417 3. NFE Accreditation and Equivalency Learning Material. Measuring Length. 2001. pp. 16-18, 28-30, 34-45 4. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. pp. 14-15,18-19	
			68. visualizes, and represents, and finds the capacity of a container using milliliter and liter.	**M3ME-IVc-41**	1. Lesson Guide in Elem. Math 3 pp.406 – 409 2. BEAM LG Gr.2 Module 18 – Mass and Capacity, Gr.3 Module 1-Capacity 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 406-409 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 406-409 6. Lesson Guide in Elem. Math Grade 3. 2012. pp. 406-409 7. BALS Video – Ang Volume	Set of Measuring cups and Spoons Measuring cup, 250mL, plastic Liter Volume Set (liter Cases)
			69. visualizes, and represents, and solves routine and non-routine problems involving capacity measure.	**M3ME-IVd-42**	1. Lesson Guide in Elem. Math 3 pp.413 – 416 2. MTB-MLE Group – Teacher's Guide 3. Lesson Guide in Elem. Math Grade 3. 2005. pp. 409-413	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					4. Lesson Guide in Elem. Math Grade 3. 2012. pp. 413-417	
			70. visualizes, and represents, and measures area using appropriate unit.	**M3ME-IVd-43**	MTB-MLE Group – Teacher's Guide	
			71. derives the formula for the area of a rectangle and a square.	**M3ME-IVe-44**	1. Lesson Guide in Elem. Math 3 pp.388 – 397 2. Lesson Guide in Elem. Math Grade 3. 2005. pp. 384-394 3. Lesson Guide in Elem. Math Grade 3. 2010. pp. 388-393; 393-398 4. Lesson Guide in Elem. Math Grade 3. 2012. pp. 388-398 5. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. pp. 21-23	Square Units/Tiles, 10cm x 10cm, plastic Square Units/Tiles, 2.54 x 2.54cm, plastic
			72. visualizes, and represents, and finds the area of a rectangle and square in sq.cm and sq. m.	**M3ME-IVe-45**	1. BEAM LG Gr.3 Module 9 – Area 2. MTB-MLE Group – Teacher's Guide 3. Mathematics for Everyday Use Grade 3. 1997. pp. 211-213*	4.
			73. solves routine and non-routine problems involving areas of squares and rectangles.	**M3ME-IVf-46**	1. Lesson Guide in Elem. Math 3 pp.398 – 405 2. BEAM LG Gr.3 Module 9 – Area 3. MTB-MLE Group – Teacher's Guide	9.

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					4. Lesson Guide in Elem. Math Grade 3. 2005. pp. 394-402 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 398-402;402-406 6. Mathematics for Everyday Use Grade 3. 1997. pp. 215-216* 7. Lesson Guide in Elem. Math Grade 3. 2012. pp. 398-406 8. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. p. 24, 26	
			74. creates problems involving area of rectangle and square.	**M3ME-IVf-47**		
Statistics and Probability	demonstrates understanding of bar graphs and outcomes of an event using the terms sure, likely, equally likely, unlikely, and impossible to happen.	is able to create and interpret simple representations of data (tables and single bar graphs) and describe outcomes of familiar events using the terms sure, likely, equally likely, unlikely, and impossible to happen.	75. collects data on one **variable** using existing records.	**M3SP-IVg-1.3**	MTB-MLE Group – Teacher's Guide	
			76. sorts, classifies, and organizes data in tabular form and presents this into a **vertical or horizontal bar graph.**	**M3SP-IVg-2.3**	1. Lesson Guide in Elem. Math 3 pp.430 – 433 2. BEAM LG Gr.4 Module 15 – Bar Graphs 3. MTB-MLE Group – Teacher's Guide 4. Lesson Guide in Elem. Math Grade 3. 2012. pp. 430-434 5. Mathematics for Everyday Life Grade 4. 2000. pp. 220-223*	6.

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			77. infers and interprets data presented in different kinds of bar graphs (vertical/ horizontal).	**M3SP-IVh-3.3**	1. Lesson Guide in Elem. Math 3 p.426 2. DLP Gr. 4 Module 88, 89 3. BEAM LG Gr.4 Module 15 – Bar Graphs 4. MTB-MLE Group – Teacher's Guide 5. Mathematics for Everyday Use Grade 3. 1997. pp. 235-237* 6. Grade School Mathematics Grade 4. 2003. pp. 226-228* 7. Mathematics for Everyday Life Grade 4. 2000. pp. 216-219*	8.
			78. solves routine and non-routine problems using data presented in a single-bar graph.	**M3SP-IVh-4.3**		
			79. tells whether an event is sure, likely, equally likely, unlikely, and impossible to happen.	**M3SP-IVi-7.3**	MTB-MLE Group – Teacher's Guide	
			80. describes events in real-life situations using the phrases "sure to happen," likely to happen", "equally likely to happen", "unlikely to happen", and "impossible to happen".	**M3SP-IVj-8.3**		

GRADE 4

CONTENT	CONTENT STANDARDS The learner…	PERFORMANCE STANDARDS The learner…	LEARNING COMPETENCY The learner…	CODE	LEARNING MATERIALS	MATH EQUIPMENT
Grade 4- FIRST QUARTER						
Numbers and Number Sense	1. demonstrates understanding of whole numbers up to 100,000. 2. demonstrates understanding of multiplication and division of whole numbers including money.	1. is able to recognize and represent whole numbers up to 100,000 in various forms and contexts. 2. is able to apply multiplication and division of whole numbers including money in mathematical problems and real-life situations.	1. visualizes numbers up to 100 000 with emphasis on numbers 10 001 – 100 000.	**M4NS-Ia-1.4**	1. BEAM LG Gr.3 Module 1.1 – Whole Numbers 2. Lesson Guide in Elem. Math Grade 3. 2010. pp. 11-14 3. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 11-14	
			2. gives the place value and value of a digit in numbers up to 100 000.	**M4NS-Ia-10.4**	1. TEEP Grade 4. 2005. pp. 4-7 2. Lesson Guide in Elem. Math Grade 3. 2010. pp. 15-18 3. Grade School Mathematics Grade 4. 2003. pp. 2-4* 4. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 15-18 5. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction in Daily Life. 2001. pp. 5-9	
			3. reads and writes numbers up to hundred thousand in symbols and in words.	**M4NS-Ia-9.4**	1. BEAM LG Gr.3 Module 1.1 – Whole Numbers 2. TEEP Grade 3. 2005. pp. 19-23, 24-28 3. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 3. 2010. pp. 18-23;23-28 4. Mathematics for Everyday Use Grade 3. 1997. pp. 4-7* 5. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 18-28	
			4. rounds numbers to the nearest thousand and ten thousand.	**M4NS-Ib-5.2**	1. BEAM LG Gr.3 Module 1.1 – Whole Numbers 2. DLP Gr. 4 Module 6 3. TEEP Grade 3. 2005. pp. 41-44 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 37-41;41-44 5. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 41-44	
			5. compares numbers up to 100 000 using relation symbols.	**M4NS-Ib-12.4**	1. TEEP Grade 3. 2005. pp. 28-33 2. Lesson Guide in Elem. Math Grade 3. 2010. pp. 28-33 3. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 28-33	
			6. orders numbers up to 100 000 in increasing or decreasing order.	**M4NS-Ib-13.4**		
			7. multiplies numbers up to 3-digit numbers by up to 2-digit numbers without or with	**M4NS-Ic-43.7**	1. BEAM LG Gr.3 Module 1-Multiplication 2. DLP Gr. 3 Module 20,	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			regrouping.		22, Gr. 5 Module 6 3. TEEP Grade 3. 2005. pp. 172-177, 177-181 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 175-180;180-184 5. Proded Math. 22A, B & C: Multiplying Whole Numbers Without Regrouping 6. Proded Math. 24A, B & C: Multiplying Whole Numbers With Regrouping 7. Grade School Mathematics Grade 4. 2003. pp. 62-63 8. Mathematics for Everyday Use Gr. 3. 1997. p. 100, 107, 113* 9. Mathematics for Everyday Life Grade 4. 2000. pp. 62-63, 70* 10. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 175-184 11. Proded Math. III-A, III-B & III-C: Multiplying Whole Numbers Without Regrouping 12. Proded Math. III-A, III-B & III-C: Multiplying Whole	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Numbers With Regrouping 13. NFE Accreditation and Equivalency Learning Material. Pagpaparami at Paghahati. 2001. pp. 4-16, 41-51 14. NFE Accreditation and Equivalency Learning Material. Multiplication and Division in Daily Life. 2001. pp. 4-13	
			8. estimates the products of 3- to 4-digit numbers by 2- to 3-digit numbers with reasonable results.	**M4NS-Ic-44.2**	1. BEAM LG Gr.3 Module 1-Multiplication 2. DLP Gr. 3 Module 21 3. TEEP Grade 3. 2005. pp. 205-208 4. TEEP Grade 5. 2005. pp. 16-20 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 204-211 6. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 204-211	
			9. multiplies mentally 2-digit by 1-to 2-digit numbers with products up to 200 and explains the strategies used.	**M4NS-Id-42.3**	1. BEAM LG Gr.3 Module 1-Multiplication, Gr. 4 – Module 4 – Multiplication 2. DLP Gr. 4 Module 31 3. TEEP Grade 3. 2005. pp. 209-213 4. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 3. 2010. pp. 212-216 5. Grade School Mathematics Grade 4. 2003. pp. 70-71* 6. Mathematics for Everyday Life Grade 4. 2000. pp. 64-65* 7. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 212-216 8. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 96-98	
			10. solves routine and non-routine problems involving multiplication of whole numbers including money using appropriate problem solving strategies and tools.	**M4NS-Id-45.4**	1. BEAM LG Gr.3 Module 1-Multiplication & Module on Problem Solving, Gr. 4 Module 4 – Multiplication 2. DLP Gr. 4 Module 34 3. TEEP Grade 4. 2005. pp. 214-217 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 216-219 5. Grade School Mathematics Grade 4. 2003. pp. 72-73* 6. Mathematics for Everyday Life Grade 4. 2000. pp. 66-71* 7. Lesson Guide in Elementary Mathematics Grade 3.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 216-219 8. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 111-113	
			11. solves multi-step routine and non-routine problems involving multiplication and addition or subtraction using appropriate problem solving strategies and tools.	**M4NS-Ie-45.5**	1. BEAM LG Gr.4 Module 4-Multiplication 2. DLP Gr. 4 Module 35 3. Lesson Guide in Elem. Math Grade 3. 2010. pp. 219-223;254-258 4. Grade School Mathematics Grade 4. 2003. pp. 75-76* 5. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 219-223 6. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 113-116	
			12. creates problems(with reasonable answers) involving multiplication or with addition or subtraction of whole numbers including money.	**M4NS-Ie-46.3**		
			13. divides 3- to 4-digit numbers by 1-to 2-digit numbers without and with remainder.	**M4NS-If-54.3**	1. BEAM LG Gr.3 Module on Division 2. DLP Gr. 3 Module 26, 27, 30, 33, 34, Gr. 4 Module 41, Gr. 5 Module 7 3. TEEP Grade 3. 2005. pp. 246-251, 252-256 4. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 3. 2010. pp. 229-233 5. Grade School Mathematics Grade 4. 2003. pp. 82-89* 6. Mathematics for Everyday Life Grade 4. 2000. pp. 72-79, 80-85, 93-94 * 7. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 248-258 8. Proded Math. III-A, III-B & III-C: Division of Whole Numbers (Without Remainder) 9. Proded Math. III-A, III-B & III-C: Division of Whole Numbers (With Remainder) 10. Proded Math. 27-A, 27-B & 27-C: Finding the Quotients Without Remainders 11. Proded Math. 29-A, 29-B & 29-C: Finding the Quotients With Remainders 12. NFE Accreditation and Equivalency Learning Material. Pagpaparami at Paghahati. 2001. pp. 17-41, 51-60 13. NFE Accreditation and Equivalency Learning	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Material. Multiplication and Division in Daily Life. 2001. pp. 18-28	
			14. divides 3- to 4-digit numbers by tens or hundreds or by 1 000 without and with remainder.	**M4NS-If-54.4**	1. MISOSA Module Gr. 4 – Division of Whole Numbers by 10, 100 and 1000 2. TEEP Grade 3. 2005. pp. 268-274 3. Lesson Guide in Elem. Math Grade 3. 2010. pp. 248-254 4. Mathematics for Everyday Life Grade 4. 2000. pp. 86-87* 5. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 270-276 6. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 122-125	
			15. estimates the quotient of 3- to 4-digit dividends by 1- to 2-digit divisors with reasonable results.	**M4NS-Ig-55.2**	MISOSA Module Gr.4 – Estimating Quotients	
			16. divides mentally 2- to 3-digit numbers by 1-digit numbers without remainder using appropriate strategies.	**M4NS-Ig-52.3**	1. BEAM LG Gr.3 Module on Division, Gr. 4 Module 5 – Division 2. Lesson Guide in Elem. Math Grade 3. 2010. pp. 276-280 3. Lesson Guide in Elem. Math Grade 4. 2010. pp. 131-133	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					4. Proded Math. 26A, B & C: Division of Whole Numbers Without Remainder 5. Proded Math. 28B: Division of Whole Numbers With Remainders 6. Grade School Mathematics Grade 4. 2003. pp. 92-93* 7. Mathematics for Everyday Life Grade 4. 2000. pp. 88-89* 8. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 276-280 9. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 131-133	
			17. solves routine and non-routine problems involving division of 3- to 4-digit numbers by 1- to 2-digit numbers including money using appropriate problem solving strategies and tools.	**M4NS-Ih-56.3**	1. BEAM LG Gr.3 Module on Division, Gr. 4 Module 5 – Division 2. MISOSA Module Gr. 4 – One-Step Word Problems involving Division 3. Lesson Guide in Elem. Math Grade 3. 2010. pp. 281-285 4. Lesson Guide in Elem. Math Grade 4. 2010. pp. 137-140 5. Grade School	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 4. 2003. pp. 94-95* 6. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 281-285 7. NFE Accreditation and Equivalency Learning Material. Multiplication and Division in Daily Life. 2001. pp. 28-35	
			18. solves multi-step routine and non-routine problems involving division and any of the other operations of whole numbers including money using appropriate problem solving strategies and tools.	**M4NS-Ih-56.4**	1. BEAM LG Gr. 4 Module 5 – Division 2. DLP Gr. 6 Module 3 3. MISOSA Module Gr. 4 – Two- to Three-Step Word Problems involving Division 4. TEEP Grade 3. 2005. pp. 287-291 5. TEEP Grade 4. 2005. pp. 139-141, 141-144 6. Lesson Guide in Elem. Math Grade 3. 2010. pp. 285-289 7. Lesson Guide in Elem. Math Grade 4. 2010. pp. 140-143;143-145 8. Grade School Mathematics Grade 4. 2003. pp. 96-97* 9. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp.285-293 10. Lesson Guide in	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Elementary Mathematics Grade 4. 2012. pp.143-145	
			19. creates problems involving division without or with any other operations of whole numbers including money, with reasonable answers	**M4NS-Ii-57.3**		
			20. represents and explains Multiplication, Division, Addition, Subtraction (MDAS) correctly.	**M4NS-Ii-61.1**		
			21. performs a series of two or more operations.	**M4NS-Ij-62.1**		
Grade 4- SECOND QUARTER						
Numbers and Number Sense	1. demonstrates understanding of factors and multiples and addition and subtraction of fractions. 2. demonstrates understanding of improper fractions and mixed numbers	1. is able to apply knowledge of factors and multiples, and addition and subtraction of fractions in mathematical problems and real-life situations. 2. is able to recognize and represent improper fractions and mixed numbers in various	22. identifies factors of a given number up to 100.	**M4NS-IIa-64**	1. Proded Math. 20A, B & C: Naming Factors	
			23. identifies the multiples of a given number up to 100.	**M4NS-IIa-65**	1. TEEP Grade 5. 2005. pp. 37-40 2. Lesson Guide in Elem. Math Grade 5. 2010. pp. 41-44	
			24. differentiates prime from composite numbers.	**M4NS-IIb-66**	1. BEAM LG Gr.5 Module 1 – Subsets of Whole Numbers, Gr. 6 Number Theory 2. Lesson Guide in Elem. Math Gr. 5 p. 30 3. MISOSA Gr. 5 Module – Prime and Composite Numbers 4. TEEP Grade 5. 2005. pp. 31-34 5. Lesson Guide in Elem. Math Grade 5. 2010.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
		forms and contexts.			pp. 37-41 6. Grade School Mathematics Grade 4. 2003. pp. 54-55* 7. Mathematics for Everyday Life Gr. 4. 2000. pp. 50-51* 8. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 30-33	
			25. writes a given number as a product of its prime factors.	**M4NS-IIb-67**	1. BEAM LG Gr.5 Module 1 – Subsets of Whole Numbers 2. DLP Gr. 5 Module 10 3. MISOSA Gr. 5 Module – Prime Factors of a Number 4. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 37-41	
			26. finds the common factors and the greatest common factor (GCF) of two numbers using the following methods: listing, prime factorization, and continuous division.	**M4NS-IIc-68.1**	1. BEAM LG Gr.5 Module 1 – Subsets of Whole Numbers 2. Lesson Guide in Elem. Math Gr. 5 p.33 3. TEEP Grade 3. 2005. pp. 315-319 4. TEEP Grade 5. 2005. pp. 27-31 5. Lesson Guide in Elem. Math Grade 3. 2010. pp. 317-321 6. Lesson Guide in Elem. Math Grade 5. 2010.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					pp. 33-37 7. Mathematics for Everyone Grade 5. 2000. pp. 76-77* 8. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 33-37 9. Proded Math. III-A, III-B & III-C: Finding the Greatest Common Factor 10. Proded Math. III-A, 18-A & 18-C: Naming Factors 11. Proded Math. 18-B, III-B & III-C: Naming Factor Pairs	
			27. finds the common multiples and least common multiple (LCM) of two numbers using the following methods: listing, prime factorization, and continuous division.	**M4NS-IIc-69.1**	1. Lesson Guide in Elem. Math Gr. 5 p.44 2. MISOSA Gr. 5 Module – Least Common Multiple 3. TEEP Grade 5. 2005. pp. 41-44 4. Lesson Guide in Elem. Math Grade 5. 2010. pp. 44-48 5. Mathematics for Everyone Grade 5. 2000. pp. 80-81* 6. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 44-48	
			28. solves real-life problems involving GCF and LCM of 2	**M4NS-IId-70.1**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			given numbers.			
			29. creates problems with reasonable answers involving GCF and LCM of 2 given numbers.	**M4NS-IId-71.1**		
			30. identifies proper fractions, improper fractions, and mixed numbers.	**M4NS-IIe-79.2**	1. BEAM LG Gr.4 Module 8 – Fractions 2. DLP Gr. 4 Module 57 3. Lesson Guide in Elem. Math Gr. 4 p.192 4. TEEP Grade 4. 2005. pp. 186-190 5. Lesson Guide in Elem. Math Grade 4. 2010. pp. 192-197 6. Grade School Mathematics Grade 4. 2003. pp. 102-103* 7. Mathematics for Everyday Life Grade 4. 2000. pp. 112-113* 8. Lesson Guide in Elementary Mathematics Gr. 4. 2012. pp. 192-197	
			31. changes improper fraction to mixed numbers and vice versa.	**M4NS-IIe-80**	1. BEAM LG Gr.4 Module 8 – Fractions 2. DLP Gr. 4 Module 61, Gr. 6 Module 26 3. Lesson Guide in Elem. Math Gr. 4 p.209, Gr. 6 p. 170 4. MISOSA Module Gr. 4 – Improper to Mixed Numbers 5. TEEP Grade 4. 2005.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					pp. 207-211 6. Lesson Guide in Elem. Math Grade 4. 2010. pp. 209-213 7. Grade School Mathematics Grade 4. 2003. pp. 114-117* 8. Mathematics for Everyday Life Grade 4. 2000. pp. 98-99, 106-107, 112-113* 9. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 209-213	
			32. changes fractions to lowest forms.	**M4NS-IIe-81**	1. BEAM LG Gr.3 Module 2 – Fractions; Gr. 6 Module 7 2. Lesson Guide in Elem. Math Gr. 6 p.166 3. TEEP Grade 5. 2005. pp. 62-67 4. Lesson Guide in Elem. Math Grade 3. 2010. pp. 321-326 5. Lesson Guide in Elem. Math Grade 5. 2010. pp. 68-73 6. Proded Math. 32A, B & C: Reducing Fractions to Lowest Terms 7. Grade School Mathematics Grade 4. 2003. pp. 110-111* 8. Mathematics for Everyday Life Grade 4.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2000. pp. 100-101* 9. Lesson Guide in Elementary Mathematics Grade 3. 2012. pp. 321-326 10. Lesson Guide in Elementary Mathematics Grade 6. 2012. pp. 166-170** 11. Proded Math. III-A, III-B & III-C: Reducing Fractions to Lowest Terms	
			33. visualizes addition and subtraction of similar fractions.	**M4NS-IIf-82.1**	1. BEAM LG Gr.4 Module 9 – Addition and Subtraction of Fractions 2. Lesson Guide in Elem. Math Gr. 4 p. 209, Gr. 5 p.124 3. Lesson Guide in Elem. Math Grade 4. 2010. pp. 217—223;230-235 4. Grade School Mathematics Grade 4. 2003. p. 124; 128* 5. Mathematics for Everyday Life Grade 4. 2000. p. 116, 122* 6. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 217-223, 230-235 7. Lesson Guide in Elementary Mathematics Grade 5.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp.124-128 8. BALS Video – Pagdaragdag at Pagbabawas ng Desimal	
			34. visualizes subtraction of a fraction from a whole number.	**M4NS-IIf-82.2**	1. BEAM LG Gr.4 Module 9 – Addition and Subtraction of Fractions 2. Lesson Guide in Elem. Math Grade 4. 2010. pp. 235-238 3. Grade School Mathematics Grade 4. 2003. pp. 130* 4. Mathematics for Everyday Life Grade 4. 2000. pp. 126-127* 5. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 235-238	
			35. visualizes addition and subtraction of dissimilar fractions.	**M4NS-IIg-82.3**	1. BEAM LG Gr.5 Module 3 – Addition of Fractions 2. Lesson Guide in Elem. Math Gr. 5 p. 83, 124 3. MISOSA Gr. 5 Module – Visualization of Dissimilar Fractions 4. TEEP Grade 5. 2005. pp. 76-81, 134-137 5. Lesson Guide in Elem. Math Grade 5. 2010. pp. 79-83;83-90;124-128	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					6. Mathematics for Everyday Life Grade 4. 2000. p. 128, 130* 7. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 83-90	
			36. performs addition and subtraction of similar and dissimilar fractions.	**M4NS-IIg-83**	1. BEAM LG Gr.4 Module 9 – Addition and Subtraction of Fractions 2. DLP Gr. 4 Module 63, 64, 65, 66, Gr. 5 Module 14, 15, 18, 20, 21 3. Lesson Guide in Elem. Math Gr. 4 217, 235, Gr. 5 p. 79, 90, 94, 128 –136 4. MISOSA Module Gr.4 – Addition of Similar Fractions, Fractions and Whole Numbers, Subtraction of Similar Fractions 5. MISOSA Module Gr.5 – Addition of Dissimilar Fractions 6. MISOSA Module Gr.6 – Subtraction of Dissimilar Fractions in Simple Forms 7. TEEP Grade 4. 2005. pp. 215-220, 227-232 8. TEEP Grade 5. 2005. pp. 81-84, 138-141 9. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 5. 2010. pp. 90-94;94-98 10. Proded Math. 34A: Adding Dissimilar Fractions 11. Mathematics for Everyday Life Grade 4. 2000. pp. 116-119, 123-125, 128-131* 12. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 217-223, 230-235 13. Proded Math. III-A: Adding and Subtracting Similar Fractions 14. Proded Math. III-B: Add and Subtract (Fractions and Wholes) 15. Proded Math. III-C: Add and Subtract (Mixed Numbers) 16. Proded Math. 34-A, 34-B & 34-C: Adding Dissimilar Fractions 17. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of Fractions. 2001. pp. 6-23, 26-31 18. NFE Accreditation and Equivalency Learning Material.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Pagdaragdag at Pagbabawas ng mga Praksiyon. 2001. pp. 5-26, 31-37	
			37. solves routine and non-routine problems involving addition and/or subtraction of fractions using appropriate problem solving strategies and tools.	**M4NS-IIh-87.1**	1. BEAM LG Gr.4 Module 9 – Addition and Subtraction of Fractions, Grade 5 Module 4 2. DLP Gr. 4 Module 67, 68, Gr. 5 Module 17 3. Lesson Guide in Elem. Math Gr. 4 p. 242, 246 4. TEEP Grade 4. 2005. pp. 239-242 5. TEEP Grade 5. 2005. pp. 106-11 6. Lesson Guide in Elem. Math Grade 4. 2010. pp. 242-249 7. Lesson Guide in Elem. Math Grade 5. 2010. pp. 119-124 8. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 242-249 9. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 119-124, 172-176 10. NFE Accreditation and Equivalency Learning Material. Addition and	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Subtraction of Fraction. 2001. pp. 24-25, 31-40 11. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Praksiyon. 2001. pp.27-30, 37-44 12. NFE Accreditation and Equivalency Learning Material. Learning About Fractions. 1998. pp. 15-23 13. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of a Fraction. 1998. pp. 4-17	
			38. creates problems(with reasonable answers) involving addition and/or subtraction of fractions.	**M4NS-IIh-88.1**		
			39. visualizes decimal numbers using models like blocks, grids, number lines and money to show the relationship to fractions.	**M4NS-IIi-99**	1. BEAM LG Gr.4 Module 7 – Decimals 2. DLP Gr. 6 Module 4 3. Grade School Mathematics Grade 4. 2003. p. 148; 152* 4. Mathematics for Everyday Life Grade 4. 2000. p. 144, 146, 148*	
			40. renames decimal numbers to fractions, and fractions whose denominators are	**M4NS-IIi-100**	1. BEAM LG Gr.4 Module 7 – Decimals; Gr. 4 Module 8 – Fractions	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			factors of 10 and 100 to decimals.		2. DLP Gr. 4 Module 44, Gr. 6 Module 23 3. Lesson Guide in Elem. Math Gr. 5 p.231, Gr. 6 p. 159 4. MISOSA Module Gr. 4 – Common Fractions as Decimals 5. MISOSA Module Gr.5 – Renaming Fractions in Decimal Form 6. Lesson Guide in Elem. Math Grade 4. 2010. pp. 148-153 7. Lesson Guide in Elem. Math Grade 5. 2010. pp. 231-237 8. Mathematics for Everyday Life Grade 4. 2000. p. 147* 9. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 148-153 10. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 231-237	
			41. gives the place value and the value of a digit of a given decimal number through hundredths.	**M4NS-IIi-101.1**	1. BEAM LG Gr.4 Module 7 – Decimals 2. MISOSA Module Gr. 4 – Place Value of Decimals 3. Lesson Guide in Elem. Math Grade 4. 2010. pp. 153-156 4. Lesson Guide in Elem.	Place Value Chart with Decimal Pockets

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 5. 2010. pp. 237-241 5. Mathematics for Everyone Grade 5. 2000. pp. 132-133* 6. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 153-156 7. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 237-241 8. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Praksiyon. 2001. pp. 4-10	
			42. reads and writes decimal numbers through hundredths.	**M4NS-IIj-102.1**	1. BEAM LG Gr.4 Module 7 – Decimals 2. DLP Gr. 4 Module 45 3. Lesson Guide in Elem. Math Grade 4. 2010. pp. 146-148 4. Grade School Mathematics Grade 4. 2003. p. 153* 5. Mathematics for Everyday Life Grade 4. 2000. p. 146* 6. Mathematics for Everyone Grade 5. 2000. p. 133* 7. Lesson Guide in Elementary	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 4. 2012. pp. 146-148	
			43. rounds decimal numbers to the nearest whole number and tenth.	**M4NS-IIj-103.1**	1. BEAM LG Gr.4 Module 7 – Decimals 2. TEEP Grade 5. 2005. pp. 217-219 3. Lesson Guide in Elem. Math Grade 4. 2010. pp. 159-162 4. Lesson Guide in Elem. Math Grade 5. 2010. pp. 247-251 5. Mathematics for Everyone Grade 5. 2000. pp. 134-135* 6. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 159-162 7. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp.247-251	
			44. compares and arranges decimal numbers.	**M4NS-IIj-104.1**	Mathematics for Everyday Life Grade 4. 2000. p. 175*	
Grade 4- THIRD QUARTER						
Geometry	demonstrates understanding of the concepts of parallel and perpendicular lines, angles, triangles, and quadrilaterals.	is able to construct and describe parallel and perpendicular lines, angles, triangles, and quadrilaterals in designs, drawings and models.	45. describes and illustrates parallel, intersecting, and perpendicular lines.	**M4GE-IIIa-12.2**	1. Lesson Guide in Elem. Math Grade 3. 2010. pp. 330-333 2. Grade School Mathematics Grade 4. 2003. p. 175* 3. Mathematics for Everyday Life Grade 4. 2000. p. 164* 4. NFE Accreditation and	Protractor, blackboard Compass, blackboard Protractor (For student)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Equivalency Learning Material. Geometric Shapes. 2001. pp. 4-6 5. NFE Accreditation and Equivalency Learning Material. Mga Linya at Anggulo. 2001. pp. 5-12 6. BALS Video – Lines and Angles	
			46. draws perpendicular and parallel lines using a ruler and a set square.	**M4GE-IIIa-12.3**		1. Blackboard Triangles Set (30° x 60° and 45° x 45°) 2. Compass, blackboard
			47. describes and illustrates different angles (right, acute, and obtuse) using models.	**M4GE-IIIb-14**	1. BEAM LG Gr.4 Module 11 – Angles and Plane Figures 2. DLP Gr. 4 Module 76, 77, 78, 79 3. Lesson Guide in Elem. Math Gr. 4 p.287, 290, 293 4. MISOSA Module Gr. 4 – Congruent Angles 5. TEEP Grade 4. 2005. pp. 292-298 6. Lesson Guide in Elem. Math Grade 4. 2010. pp. 290-293 7. Grade School Mathematics Grade 4. 2003. pp.183-185* 8. Mathematics for	Linear Pair/Angle Demonstrator

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Everyday Life Grade 4. 2000. pp. 170-171* 9. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 290-295 10. NFE Accreditation and Equivalency Learning Material. Geometric Shapes. 2001. pp. 7-11 11. NFE Accreditation and Equivalency Learning Material. Mga Linya at Anggulo. 2001. pp. 13-22 12. BALS Video – Shapes and Figures Around Us 13. BALS Video – Lines and Angles	
			48. describes the attributes/properties of triangles and quadrilaterals using concrete objects or models.	**M4GE-IIIb-15**	1. BEAM LG Gr.4 Module 11 – Angles and Plane Figures 2. DLP Gr. 4 Module 81	
			49. identifies and describes triangles according to sides and angles.	**M4GE-IIIc-16**	1. BEAM LG Gr.4 Module 11 – Angles and Plane Figures 2. DLP Gr. 3 Module 41, Gr. 4 Module 73 3. Lesson Guide in Elem. Math Gr. 4 p.298 4. TEEP Grade 4. 2005. pp. 274-277 5. Lesson Guide in Elem.	Blackboard Triangles Set (30° x 60° and 45° x 45°)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Math Grade 4. 2010. pp. 298-302 6. Grade School Mathematics Grade 4. 2003. pp. 188-189* 7. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 298-302	
			50. identifies and describes the different kinds of quadrilaterals: square, rectangle, parallelogram, trapezoid, and rhombus.	**M4GE-IIIc-17**	1. BEAM LG Gr.4 Module 11 – Angles and Plane Figures 2. TEEP Grade 4. 2005. pp. 277-282 3. Lesson Guide in Elem. Math Grade 4. 2010. pp. 276-280 4. Grade School Mathematics Grade 4. 2003. pp. 190-191* 5. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 276-280 6. NFE Accreditation and Equivalency Learning Material. Geometric Shapes. 2001. pp. 13-14	Models of 7-sided to 12 sided regular polygons
			51. relates triangles to quadrilaterals	**M4GE-IIId-18.1**		Geostrips
			52. relates one quadrilateral to another quadrilateral (e.g. square to rhombus).	**M4GE-IIId-18.2**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Patterns and Algebra	demonstrates understanding of concepts of continuous and repeating patterns and number sentences.	is able to identify the missing element in a pattern and number sentence.	53. determines the missing term/s in a sequence of numbers (e.g. odd numbers, even numbers, multiples of a number, factors of a number, etc.) e.g. 3,6,9,__ 4,8,12,16,__ (e.g. odd numbers, even numbers, multiples of a number, factors of a number, etc.) 	**M4AL-IIIe-5**		
			54. finds the missing number in an equation involving properties of operations. (e.g. (4+__) + 8 = 4 + (5 + __)	**M4AL-IIIe-13**		
Measurement	demonstrates understanding of the concept of time, perimeter, area, and volume.	is able to apply the concepts of time, perimeter, area, and volume to mathematical problems and real-life situations.	55. finds the elapsed time in minutes and seconds.	**M4ME-IIIf-11**	1. NFE Accreditation and Equivalency Learning Material. Ito'y Tungkol Sa Oras. 2001. pp. 5-19 2. NFE Accreditation and Equivalency Learning Material. It's About Time. 2001. pp. 2-16	
			56. estimates the duration of time in minutes.	**M4ME-IIIf-12**		
			57. solves problems involving elapsed time.	**M4ME-IIIg-13**		
			58. visualizes the perimeter of any given plane figure in different situations.	**M4ME-IIIg-48**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			59. measures the perimeter of any given figure using appropriate tools.	**M4ME-IIIh-49**	1. DLP Gr. 4 Module 84 2. Grade School Mathematics Grade 4. 2003. pp. 206-207* 3. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. pp. 5-10	1. Meterstick, plastic 2. Ruler, 12" or 30cm 3. Tape Measure, 1.5 meter
			60. derives the formula for perimeter of any given figure.	**M4ME-IIIh-50**	BEAM LG Gr.4 Module 18 – Perimeter	
			61. finds the perimeter of triangles, squares, rectangles, parallelograms, and trapezoids.	**M4ME-IIIi-51**	1. BEAM LG Gr.4 Module 18 – Perimeter 2. DLP Gr. 4 Module 82, 83, 86 3. Lesson Guide in Elem. Math Gr. 4 p.302, 305 4. TEEP Grade 4. 2005. pp. 300-303 5. Lesson Guide in Elem. Math Grade 4. 2010. pp. 302-305 6. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 302-309 7. NFE Accreditation and Equivalency Learning Material. Measurement, Perimeter and Circumference. 2001. pp. 10-19 8. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. pp.5-	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					10 9. NFE Accreditation and Equivalency Learning Material. Perimeter and Areas. 1999. pp. 5-9 10. BALS Video – Lesson 2: Finding the Perimeter	
			62. solves routine and non-routine problems in real-life situations involving perimeter of squares and rectangles, triangles, parallelograms, and trapezoids.	**M4ME-IIIi-52**	1. BEAM LG Gr.4 Module 18 – Perimeter 2. Lesson Guide in Elem. Math Gr. 4 p.309 3. TEEP Grade 4. 2005. pp. 307-309 4. Lesson Guide in Elem. Math Grade 4. 2010. pp. 309-311 5. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 309-311 6. NFE Accreditation and Equivalency Learning Material. Measurement, Perimeter and Circumference. 2001. pp. 18-19	
			63. differentiates perimeter from area.	**M4ME-IIIj-53**		1. Basic 3-Dimensional Models 2. Circle Area Demonstrator 3. Geoboard, 11 x 11

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
						4. Models of 7-sided to 12 sided regular polygons
			64. converts sq. cm to sq. m and vice versa.	**M4ME-IIIj-54**		
Grade 4- FOURTH QUARTER						
			65. finds the area of irregular figures made up of squares and rectangles using sq. cm and sq. m.	**M4ME-IVa-55**	Grade School Mathematics Grade 4. 2003. pp. 210-211*	
			66. estimates the area of irregular plane figures made up of squares and rectangles.	**M4ME-IVa-56**		
			67. derives the formulas for the area of triangles, parallelograms, and trapezoids.	**M4ME-IVb-57**	1. BEAM LG Gr.4 Module 13 – Area 2. DLP Gr. 4 Module 85 3. Lesson Guide in Elem. Math Gr. 4 p.315, 317, 321, 325 4. TEEP Grade 4. 2005. pp. 318-321 5. Lesson Guide in Elem. Math Grade 4. 2010. pp. 315-317;321-324 6. Mathematics for Everyone Grade 5. 2000. p. 202* 7. Lesson Guide in Elementary Mathematics Grade 4. 2012. p. 315-328	
			68. finds the area of triangles, parallelograms and trapezoids using sq. cm and sq. m.	**M4ME-IVb-58**	1. BEAM LG Gr.4 Module 13 – Area, Gr. 5 Module 14 – Area 2. DLP Gr. 4 Module 48,	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Gr. 5 Module 47, 50 3. Lesson Guide in Elem. Math Gr. 5 p.372, 377, Gr. 6 p. 373, 378 4. MISOSA Module Gr.5 – Area of a Trapezoid 5. TEEP Grade 4. 2005. pp. 314-317 6. TEEP Grade 5. 2005. pp. 309-317 7. Lesson Guide in Elem. Math Grade 4. 2010. pp. 317-321;325-328 8. Lesson Guide in Elem. Math Grade 5. 2010. pp. 372-377; 377-382 9. Mathematics for Everyone Grade 5. 2000. pp. 202-203* 10. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 315-328 11. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 372-382 12. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. pp. 5-10 13. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. pp.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					24-26	
			69. estimates the area of triangles, parallelograms, and trapezoids	**M4ME-IVc-59**		
			70. solves routine and non-routine problems involving squares, rectangles, triangles, parallelograms, and trapezoids.	**M4ME-IVc-60**	1. BEAM LG Gr.4 Module 13 – Area 2. Lesson Guide in Elem. Math Gr. 5 p. 386 3. Mathematics for Everyone Grade 5. 2000. pp. 204-205* 4. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 386-389 5. NFE Accreditation and Equivalency Learning Material. Perimeters and Areas. 1998. p. 24, 26	
			71. creates problems(with reasonable answers) involving perimeter and area involving squares, rectangles, triangles, parallelograms, and trapezoids.	**M4ME-IVd-61**		
			72. visualizes the volume of solid figures in different situations using non-standard (e.g. marbles, etc.) and standard units.	**M4ME-IVd-62**	1. BEAM LG Gr.4 Module 14 – Volume 2. DLP Gr. 4 Module 87 3. Lesson Guide in Elem. Math Gr. 5 p.328 4. TEEP Grade 4. 2005. pp. 324-328 5. Lesson Guide in Elem. Math Grade 4. 2010. pp. 328-331	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					6. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp.328-331 7. BALS Video – Lesson 1: Units of Volume 8. BALS Video – Lesson 2: Measuring Volume 9. BALS Video – Lesson 3: Indigenous Measures of Volume	
			73. derives the formula for the volume of rectangular prisms.	**M4ME-IVe-63**	1. TEEP Grade 5. 2005. pp. 328-331 2. Lesson Guide in Elem. Math Grade 5. 2010. pp. 395-399 3. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 395-399 4. Lesson Guide in Elementary Mathematics Grade 6. 2012. pp. 391-397 5. BALS Video – Lesson 2: Measuring Volume	1. Basic 3-Dimensional Models 2. Models of deriving formula for volume: 1000 pcs – 1 cm linking plastic cubes
			74. finds the volume of a rectangular prism using cu. cm and cu. m.	**M4ME-IVe-64**	1. Lesson Guide in Elem. Math Gr. 6 p.391 2. BALS Video – Lesson 2: Measuring Volume	
			75. solves routine and non-routine problems involving the volume of a rectangular prism.	**M4ME-IVf-65**	1. TEEP Grade 5. 2005. pp. 332-334 2. Lesson Guide in Elem. Math Grade 5. 2010. pp. 399-402 3. BALS Video – Lesson 2:	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
					Measuring Volume	
			76. creates problems(with reasonable answers) involving volume of rectangular prism.	**M4ME-IVf-66**		
Statistics and Probability	demonstrates understanding of the concepts of bar graphs and simple experiments.	is able to create and interpret simple representations of data (tables and bar graphs) and describe outcomes in simple experiments.	77. collects data on two variables using any source.	**M4SP-IVg-1.4**		
			78. organizes data in tabular form and presents them in a single/double horizontal or vertical bar graph.	**M4SP-IVg-2.4**	1. Lesson Guide in Elem. Math Gr. 4 p.331, 337 2. TEEP Grade 4. 2005. pp. 332-335 3. Lesson Guide in Elem. Math Grade 4. 2010. pp. 331-336 4. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 337-339	
			79. interprets data presented in different kinds of bar graphs (vertical/horizontal, single/double bars).	**M4SP-IVg-3.4**	1. TEEP Grade 4. 2005. pp. 328-332 2. Grade School Mathematics Grade 4. 2003. pp. 226-229* 3. Mathematics for Everyday Life Grade 4. 2000. pp. 216-221* 4. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 331-336	
			80. solves routine and non-routine problems using data presented in a single or double-bar graph.	**M4SP-IVh-4.4**		
			81. draws inferences based on data presented in a double-	**M4SP-IVh-5.4**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			bar graph.			
			82. records favorable outcomes in a simple experiment (e.g. tossing a coin, spinning a wheel, etc.)	**M4SP-IVi-9**		
			83. expresses the outcome in a simple experiment in words, symbols, tables, or graphs.	**M4SP-IVi-10**		
			84. explains the outcomes in an experiment.	**M4SP-IVi-11**		
			85. solves routine and non-routine problems involving a simple experiment.	**M4SP-IVj-12**		
			86. creates problems involving a simple experiment.	**M4SP-IVj-13**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 5- FIRST QUARTER						
Numbers and Number Sense	1. demonstrates understanding of whole numbers up to 10 000 000. 2. demonstrates understanding of divisibility, order of operations, factors and multiples, and the four fundamental operations involving fractions	1. is able to recognize and represent whole numbers up to 10 000 000 in various forms and contexts. 2. is able to apply divisibility, order of operations, factors and multiples, and the four fundamental operations involving fractions in mathematical problems and real-life situations.	1. visualizes numbers up to 10 000 000 with emphasis on numbers 100 001 – 10 000 000.	**M5NS-Ia-1.5**	1. DLP Gr. 3 Module 1, Gr. 4 Module 1 2. BEAM LG Gr. 4 Module 1- Whole Numbers 3. Lesson Guide in Elem. Math Gr. 4 p. 1 4. MISOSA Gr. 4 Module – Numbers through Billions 5. Lesson Guide in Elem. Mathematics Grade 4. 2005. pp. 1-4 6. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 1-3 7. Lesson Guide in Elem. Mathematics Grade 4. 2010. pp. 1-4 8. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 1-4 9. Mathematics for Everyday Life Grade 4. 2000. p. 2* 10. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 1-4	
			2. reads and writes numbers up to 10 000 000 in symbols and in words.	**M5NS-Ia-9.5**	1. DLP Gr. 3 Module 3, Gr. 4 Module 3 2. BEAM LG Gr. 4 Module 1- Whole Numbers, Gr. 5 Module 1	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					3. Lesson Guide in Elem. Math Gr. 4 p. 7, Gr. 5 p. 1 4. Lesson Guide in Elem. Mathematics Grade 4. 2005. pp. 7-9 5. Lesson Guide in Elem. Mathematics Grade 4. 2010. pp. 7-9 6. Mathematics for Everyday Life Grade 4. 2000. pp. 3-5* 7. Mathematics for Everyone Grade 5. 2000. p. 8* 8. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 7-9	
			3. rounds numbers to the nearest hundred thousand and million.	**M5NS-Ia-15.3**	1. DLP Gr. 3 Module 6, Gr. 5 Module 4 2. BEAM LG Gr. 4 Module – Rounding Off Numbers 3. Lesson Guide in Elem. Math Gr. 4 p. 13 4. MISOSA Gr. 4 Module – Rounding Numbers 5. Lesson Guide in Elem. Mathematics Grade 4. 2005. pp. 13-15; 15-18 6. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 9-12 7. Lesson Guide in Elem. Mathematics Grade 4. 2010. pp. 13-18	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					8. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 9-13 9. Mathematics for Everyday Life Grade 4. 2000. 10-13* 10. Grade School Mathematics Grade 4. 2003. p. 16* 11. Lesson Guide in Elementary Mathematics Grade 4. 2012. pp. 13-18	
			4. uses divisibility rules for 2, 5, and 10 to find the common factors of numbers.	**M5NS-Ib-58.1**	1. DLP Gr. 4 Module 4, Gr. 5 Module 1, 12 2. Lesson Guide in Elem. Math Gr. 5 p.48 3. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 44-47 4. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 48-51 5. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 48-51	
			5. uses divisibility rules for 3, 6, and 9 to find common factors.	**M5NS-Ib-58.2**	1. DLP Gr. 5 Module 1, 12 2. Lesson Guide in Elem. Math Gr. 5 p.51, 57 3. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 47-50 4. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 51-54 5. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 5. 2012. pp. 51-54	
			6. uses divisibility rules for 4, 8, 12, and 11 to find common factors.	**M5NS-Ib-58.3**	DLP Gr. 5 Module 1, 12	
			7. solves routine and non-routine problems involving factors, multiples, and divisibility rules for 2,3,4,5,6,8,9,10,11, and 12.	**M5NS-Ic-59**	1. Lesson Guide in Elem. Math Gr. 5 p.57 2. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 54-59	
			8. creates problems(with reasonable answers) involving factors, multiples and divisibility rules.	**M5NS-Ic-60**		
			9. states, explains, and interprets Parenthesis, Multiplication, Division, Addition, Subtraction (PMDAS) or Grouping, Multiplication, Division, Addition, Subtraction (GMDAS) rule.	**M5NS-Ic-61.2**		
			10. simplifies a series of operations on whole numbers involving more than two operations using the PMDAS or GMDAS rule.	**M5NS-Id-62.2**		
			11. finds the common factors and the GCF of 2–4 numbers using continuous division.	**M5NS-Id-68.2**	1. DLP Gr. 5 Module 9 2. BEAM LG Gr. 6 – Number Theory 3. Lesson Guide in Elem. Math Gr. 5 p.33, Gr. 6 p. 148 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 27-31 5. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 6. 2005. pp. 134-137 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 33-37 7. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 148-151 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 33-37	
			12. finds the common multiples and LCM of 2–4 numbers using continuous division.	**M5NS-Id-69.2**	1. DLP Gr. 5 Module 11 2. BEAM LG Gr. 6 – Number Theory 3. Lesson Guide in Elem. Math Gr. 5 p.44, Gr. 6 p. 151 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 41-44 5. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 143-147 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 44-48 7. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 151-155 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 44-48	
			13. solves real-life problems involving GCF and LCM of 2-3 given numbers.	**M5NS-Ie-70.2**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			14. creates problems(with reasonable answers)involving GCF and LCM of 2-3 given numbers.	**M5NS-Ie-71.2**		
			15. adds fractions and mixed fractions without and with regrouping.	**M5NS-Ie-84**	1. DLP Gr. 5 Module 16, 22 2. Lesson Guide in Elem. Math Gr. 5 p. 99 – 107 3. MISOSA Gr. 5 Modules on Addition of Fractions and Mixed Forms 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 71-76; 81-100 5. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 104-107 6. Mathematics for Everyone Grade 5. 2000. pp. 94-95* 7. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 217-227 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 79-111 9. Proded Math. III-A: Adding and Subtracting Similar Fractions 10. Proded Math. IIIB & III-C: Add and Subtract Fractions and Wholes 11. Proded Math. 34-A, 34-B & 34-C: Adding Dissimilar Fractions	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					12. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of Fractions. 2001. pp. 6-23 13. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Praksiyon. 2001. pp. 5-15	
			16. subtracts fractions and mixed fractions without and with regrouping.	**M5NS-If-85**	1. BEAM LG Gr. 5 Module 4 – Subtraction of Dissimilar Fractions 2. Lesson Guide in Elem. Math Gr. 5 p. 140-166 3. MISOSA Gr. 5 Modules on Subtraction of Fractions and Mixed Forms 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 115-151 5. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 159-165 6. Mathematics for Everyday Use Grade 6. 1999. pp. 103-105* 7. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 230-238 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 124-171	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					9. Proded Math. III-A: Adding and Subtracting Similar Fractions 10. Proded Math. IIIB & III-C: Add and Subtract Fractions and Wholes 11. Proded Math. 34-A, 34-B & 34-C: Adding Dissimilar Fractions 12. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of Fractions. 2001. pp. 26-31 13. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Praksiyon. 2001. pp. 25-26	
			17. solves routine and non-routine problems involving addition and/or subtraction of fractions using appropriate problem solving strategies and tools.	**M5NS-If-87.2**	1. BEAM LG Gr. 5 Module 7 – Application of Subtraction of Fraction 2. Lesson Guide in Elem. Math Gr. 5 p. 119, 172,176 3. MISOSA Gr. 5 Modules on Addition and Subtraction of Word problems involving Fractions 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 106-111; 151-159	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					5. Lesson Guide in Elem. Mathematics Gr. 5. 2010. pp. 119-124; 172-181 6. Mathematics for Everyone Grade 5. 2000. pp. 96-97, 106-107* 7. Mathematics for Everyday Use Grade 6. 1999. p. 105* 8. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 242-249 9. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 119-124, 172-181 10. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of Fractions. 2001. pp. 24-25, 31-40 11. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of Fractions. 1998. pp. 4-17, 18-25, 26-34 12. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Praksiyon. 2001. pp. 27-30, 37-41	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			18. creates problems (with reasonable answers) involving addition and/or subtraction of fractions using appropriate problem solving strategies.	**M5NS-If-88.2**		
			19. visualizes multiplication of fractions using models.	**M5NS-Ig-89**	1. DLP Gr. 4 Module 69 2. BEAM LG Gr. 4 Module 10 – Multiplication of Fractions 3. Lesson Guide in Elem. Math Gr. 4 p. 250, Gr. 5 p.180 4. MISOSA Gr. 5 Module – Visualization of Multiplication of Fractions 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 159-164 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 181-187 7. Mathematics for Everyday Life Grade 4. 2000. p. 132* 8. Mathematics for Everyone Grade 5. 2000. pp. 112-113* 9. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 250-254 10. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 181-187	
			20. multiplies a fraction and a whole number and another	**M5NS-Ig-90.1**	1. DLP Gr. 4 Module 70, Gr. 5 Module 25	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			fraction.		2. BEAM LG Gr. 4 Module 10 – Multiplication of Fractions 3. Lesson Guide in Elem. Math Gr. 4 p. 254, 261, Gr. 5 p.187, 196, 200 4. MISOSA Gr. 5 Modules –Multiplication of Fractions 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 171-174; 174-177 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 196-200; 203-209 7. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 261-263 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 187-191, 196-213 9. BALS Video – Lesson 1: Multiplication and Division of Proper and Improper Fractions	
			21. multiplies mentally proper fractions with denominators up to 10.	**M5NS-Ig-91**	1. Mathematics for Everyone Grade 5. 2000. p. 115*	
			22. solves routine or non-routine problems involving multiplication without or with addition or subtraction of fractions and whole numbers	**M5NS-Ih-92.1**	1. DLP Gr. 4 Module 71 2. BEAM LG Gr. 4 Module 10 – Multiplication of Fractions 3. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			using appropriate problem solving strategies and tools.		Math Gr. 4 p.264, 269 4. MISOSA Gr. 5 Modules –Word problems on Multiplication of Fractions 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 186-190 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 213-217 7. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 264-272 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 213-217	
			23. creates problems (with reasonable answers) involving multiplication of fractions.	**M5NS-Ih-93.1**		
			24. shows that multiplying a fraction by its reciprocal is equal to 1.	**M5NS-Ih-94**	1. Mathematics for Everyday Use Grade 6. 1999. p. 129* 2. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 253-258	
			25. visualizes division of fractions.	**M5NS-Ii-95**	1. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 249-253 2. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 266-270	
			26. divides - simple fractions - whole numbers by a fraction and vice versa	**M5NS-Ii-96.1**	1. DLP Gr. 6 Module 38 2. MISOSA Modules Gr.6 – Division of Fractions 3. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 6. 2005. pp. 254-257; 257-260 4. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 270-277 5. Mathematics for Everyday Use Grade 6. 1999. pp. 137-139* 6. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 270-282 7. BALS Video – Lesson 1: Multiplication and Division of Proper and Improper Fractions	
			27. solves routine or non-routine problems involving division without or with any of the other operations of fractions and whole numbers using appropriate problem solving strategies and tools .	**M5NS-Ij-97.1**	1. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 266-269; 269-273 2. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 282-289 3. Mathematics for Everyday Use Grade 6. 1999. pp. 139-144* 4. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 282-289	
			28. creates problems (with reasonable answers) involving division or with any of the other operations of fractions and whole numbers.	**M5NS-Ij-98.1**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
Grade 5- SECOND QUARTER						
Numbers and Number Sense	1. demonstrates understanding of decimals. 2. demonstrates understanding of the four fundamental operations involving decimals and ratio and proportion.	1. is able to recognize and represent decimals in various forms and contexts. 2. is able to apply the four fundamental operations involving decimals and ratio and proportion in mathematical problems and real-life situations.	29. gives the place value and the value of a digit of a given decimal number through ten thousandths.	**M5NS-IIa-101.2**	1. DLP Gr. 6 Module 5 2. Lesson Guide in Elem. Math Gr. 5 p.237, Gr. 6 p. 38 3. MISOSA Module Gr.6 – Place Value of Decimals 4. Lesson Guide in Elem. Mathematics Grade 4. 2005. pp. 151-154 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 211-213 6. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 35-39 7. Lesson Guide in Elem. Mathematics Grade 4. 2010. pp. 153-156 8. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 237-241 9. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 38-43 10. Grade School Mathematics Grade 4. 2003. p. 166* 11. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 153-156 12. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp.237-241 13. Lesson Guide in Elem. Mathematics Grade 6.	Place Value Chart with Decimal Pockets

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 38-43 14. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of Fractions. 2001. pp. 26-31 15. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Desimal. 2001. pp. 4-10	
			30. reads and writes decimal numbers through ten thousandths.	**M5NS-IIa-102.2**	1. DLP Gr. 4 Module 47, Grade 5 Module 30, Gr. 6 Module 6 2. BEAM LG Gr. 5 Decimals, Gr. 6 Module 2 3. Lesson Guide in Elem. Math Gr. 5 p.241, Gr. 6 p.43 4. MISOSA Module Gr.6 – Read and Write Decimals 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 213-217 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 241-247 7. Grade School Mathematics Grade 4. 2003. pp. 152-153, 166, 168 8. Mathematics for	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Everyday Use Grade 6. 1999. pp. 154-155* 9. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 146-148 10. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 241-247 11. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 43-46	
			31. rounds decimal numbers to the nearest hundredth and thousandth.	**M5NS-IIa-103.2**	1. DLP Gr. 4 Module 49, Grade 5 Module 31, Gr. 6 Module 8 2. BEAM LG Gr. 5 Decimals, Gr. 6 Module 2 3. Lesson Guide in Elem. Math Gr. 5 p.247, Gr. 6 p.49 4. MISOSA Gr. 5 and 6 Modules –Rounding Decimals 5. Lesson Guide in Elem. Mathematics Grade 4. 2005. pp. 157-160 6. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 217-219 7. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 46-48 8. Lesson Guide in Elem. Mathematics Grade 4. 2010. pp. 159-162 9. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 5. 2010. pp. 247-251 10. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 49-51 11. Mathematics for Everyone Grade 5. 2000. p. 135* 12. Mathematics for Everyday Use Grade 6. 1999. pp. 156-158* 13. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 159-162 14. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 247-251	
			32. compares and arranges decimal numbers.	**M5NS-IIb-104.2**	1. DLP Gr. 6 Module 7 2. BEAM LG Gr. 6 Module 2 3. Lesson Guide in Elem. Math Gr. 6 p. 46 4. MISOSA Module Gr.6 – Compare and Order Decimals 5. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 42-45 6. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 46-49 7. Grade School Mathematics Grade 4. 2000. pp. 153-154* 8. Lesson Guide in Elem. Mathematics Grade 6.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 46-49	
			33. visualizes addition and subtraction of decimals.	**M5NS-IIb-105**	Mathematics for Everyday Life Grade 4. 2000. pp. 150, 152*	
			34. adds and subtracts decimal numbers through thousandths without and with regrouping.	**M5NS-IIb-106.1**	1. DLP Gr. 4 Module 50, 51, 52, 53, Grade 5 Module 32, 34 2. BEAM LG Gr. 4 Module 7 – Addition and Subtraction of Decimals, Gr. 5 Module 7 3. Lesson Guide in Elem. Math Gr. 5 p.117, 251, 254, 257, 264 4. MISOSA Gr. 4 and Gr. 5 Modules – Addition and Subtraction of Decimals 5. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 251-267 6. Mathematics for Everyone Grade 5. 2000. pp. 136-139* 7. Mathematics for Everyday Use Grade 6. 1999. pp. 159-162* 8. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 162-169 9. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 251-267 10. Proded Math. III-C: Add and Subtract Decimals	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					11. Proded Math. III-B: Add and Subtract Mixed Decimals 12. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Desimal. 2001. pp. 19-21, 27-32	
			35. estimates the sum or difference of decimal numbers with reasonable results.	**M5NS-IIc-107**	1. DLP Gr. 6 Module 9 2. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 51-54	
			36. solves routine or non-routine problems involving addition and subtraction of decimal numbers including money using appropriate problem solving strategies and tools.	**M5NS-IIc-108.1**	1. DLP Gr. 4 Module 54, 55, 56, Grade 5 Module 35 2. BEAM LG Gr. 4 Module 7 – Addition and Subtraction of Decimals, Gr. 5 Module 7 3. Lesson Guide in Elem. Math Gr. 5 p.271 4. MISOSA Gr. 4 Modules – Word Problems on Addition and Subtraction of Decimals 5. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 268-273 6. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 68-70 7. Mathematics for Everyday Life Grade 4. 2000. pp. 156-157,	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					159* 8. Grade School Mathematics Grade 4. 2003. pp. 162-163* 9. Mathematics for Everyone Grade 5. 2000. p. 145* 10. Mathematics for Everyday Use Grade 6. 1999. pp. 169-171* 11. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 175-188 12. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 268-273 13. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng mga Desimal. 2001. pp. 22-26	
			37. creates problems (with reasonable answers) involving addition and/or subtraction of decimal numbers including money.	**M5NS-IIc-109.1**		
			38. visualizes multiplication of decimal numbers using pictorial models.	**M5NS-IId-110**	1. Lesson Guide in Elem. Math Gr. 5 p.274 2. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 235-238 3. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 274-278 4. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 5. 2012. pp. 274-275	
			39. multiplies decimals up to 2 decimal places by 1- to 2-digit whole numbers.	**M5NS-IId-111.1**	1. MISOSA Gr. 5 Module – Multiplication of Decimals and Whole Numbers 2. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 80-83 3. Proded Math. 36A: Multiplying Decimals 4. Mathematics for Everyday Use Grade 6. 1999. pp. 174-175*	
			40. multiplies decimals with factors up to 2 decimal places.	**M5NS-IId-111.2**	1. Lesson Guide in Elem. Math Gr. 5 p.279, 282 2. MISOSA Gr. 5 Module – Multiplication of Decimals through Hundredths 3. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 279-297 4. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 73-89 5. Proded Math. 36-A: Multiplying Decimals 6. Proded Math. 36-B: Multiplying More Decimals 7. Proded Math. 36-C: Multiplying Mixed Decimals 8. NFE Accreditation and Equivalency Learning	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Material. Multiplication and Division of Decimals. 2001. pp. 4-16	
			41. estimates the products of decimal numbers with reasonable results.	**M5NS-IIe-112**	1. DLP Gr. 6 Module 13 2. MISOSA Module Gr.6 – Estimating Quotients of Decimals 3. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 66-68 4. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 70-73	
			42. solves routine and non-routine problems involving multiplication without or with addition or subtraction of decimals and whole numbers including money using appropriate problem solving strategies and tools.	**M5NS-IIe-113.1**	1. MISOSA Gr. 5 Module – Word Problems on Multiplication of Decimals 2. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 255-257 3. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 88-91; 91-94 4. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 301-305 5. Lesson Guide in Elem. Mathematics Gr. 6. 2010. pp. 93-100 6. Lesson Guide in Elementary Mathematics Gr. 6. 2012. pp. 93-100 7. Mathematics for Everyone Gr. 5. 2000.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					pp. 159-161* 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 213-217 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 93-100 10. NFE Accreditation and Equivalency Learning Material. Multiplication and Division of Decimals. 2001. pp. 17-21	
			43. visualizes division of decimal numbers using pictorial models.	**M5NS-IIf-115**	1. Lesson Guide in Elem. Math Gr. 5 p.305 2. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 258-261 3. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 305-310 4. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 305-310	Base 10 Blocks
			44. divides decimals with up to 2 decimal places.	**M5NS-IIf-116.1**	1. DLP Grade 5 Module 42 2. BEAM LG Gr. 5 Module 13 3. Lesson Guide in Elem. Math Gr. 5 p.314 4. MISOSA Gr. 5 Module – Division of Decimals 5. Lesson Guide in Elementary Mathematics Grade 5. 2012. pp. 310-318 6. Mathematics for	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Everyone Grade 5. 2000. pp. 162-163* 7. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 310-318 8. NFE Accreditation and Equivalency Learning Material. Multiplication and Division of Decimals. 2001. pp. 22-32	
			45. divides whole numbers with quotients in decimal form.	**M5NS-IIf-116.2**	1. Lesson Guide in Elem. Math Gr. 6 p.109 2. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 261-264 3. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 103-105 4. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 314-318 5. Mathematics for Everyone Grade 5. 2000. pp. 164-165* 6. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 109-111	
			46. estimates the quotients of decimal numbers with reasonable results.	**M5NS-IIg-117**	1. DLP Gr. 6 Module 18 2. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 94-97 3. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 100-102*****	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			47. solves routine and non-routine problems involving division without or with any of the other operations of decimals and whole numbers including money using appropriate problem solving strategies and tools.	**M5NS-IIg-120.1**	1. DLP Grade 5 Module 43 2. BEAM LG Gr. 5 Module 13 3. MISOSA Gr. 5 Module – Word Problems on Division of Decimals 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 268-270 5. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 123-129 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 318-321 7. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 130-136 8. Mathematics for Everyone Grade 5. 2000. pp. 166-167* 9. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 318-321 10. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 130-136 11. NFE Accreditation and Equivalency Learning Material. Multiplication and Division of Decimals. 2001. pp. 32-41	
			48. creates problems (with reasonable answers) involving multiplication and/or division	**M5NS-IIg-121.1**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			or with any of the other operations of decimals and whole numbers including money.			
			49. visualizes the ratio of 2 given numbers.	**M5NS-IIh-122**	1. MISOSA Gr. 5 Module – Visualization of Ratio 2. Mathematics for Everyday Life Grade 4. 2000. p. 134* 3. Grade School Mathematics Grade 4. 2003. p. 140*	
			50. expresses ratio using either the colon (:) or fraction.	**M5NS-IIh-123**	1. DLP Gr. 6 Module 42 2. BEAM LG Gr. 5 Module 9, Gr. 6 Module 11 3. Lesson Guide in Elem. Math Gr. 5 p.218 4. MISOSA Gr. 5 Module – Expressing Ratio 5. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 273-276 6. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 289-293 7. Mathematics for Everyday Life Grade 4. 2000. p. 136* 8. Grade School Mathematics Grade 4. 2003. p. 141* 9. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 218-222 10. Lesson Guide in Elem. Mathematics Grade 6.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 289-293	
			51. identifies and writes equivalent ratios.	**M5NS-IIi-124**	1. DLP Grade 5 Module 29 2. BEAM LG Gr. 5 Module 9 3. Lesson Guide in Elem. Math Gr. 5 p.227 4. MISOSA Gr. 5 Module – Proportion 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 196-200 6. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 227-231 7. BALS Video – Ratio and Proportion	
			52. expresses ratios in their simplest forms.	**M5NS-IIi-125**	1. Lesson Guide in Elem. Math Gr. 5 p.222 2. MISOSA Gr. 5 Module – Ratio in its Simplest Form 3. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 194-196 4. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 276-280 5. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 293-297 6. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 222-226 7. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 293-297	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					8. BALS Video – Ratio and Proportion	
			53. finds the missing term in a pair of equivalent ratios.	**M5NS-IIi-126**	1. DLP Gr. 6 Module 43 2. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 280-283 3. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 297-301 4. Mathematics for Everyday Life Grade 4. 2000. p. 137* 5. Mathematics for Everyday Use Grade 6. 1999. pp. 146-147*	
			54. defines and describes a proportion.	**M5NS-IIj-127**	Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 289-293	
			55. recognizes when two quantities are in direct proportion.	**M5NS-IIj-128**		
Grade 5- THIRD QUARTER						
	demonstrates understanding of percent.	is able to apply percent in mathematical problems and real-life situations	56. visualizes percent and its relationship to fractions, ratios, and decimal numbers using models.	**M5NS-IIIa-136**	1. DLP Gr. 5 Module 44 2. BEAM LG Gr. 5 Module 14 3. Lesson Guide in Elem. Math Gr. 5 p.321, 325, 330, 334 4. MISOSA Gr. 5 Modules–Percent, Fraction, Ratio and Decimal 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 280-283 6. Mathematics for	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Everyone Grade 5. 2000. p. 172* 7. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 321-339 8. BALS Video – Solving Percentage Problems	
			57. defines percentage, rate or percent, and base.	**M5NS-IIIa-137**	1. DLP Gr. 6 Module 45 2. BEAM LG Gr. 6 Module 17 3. Lesson Guide in Elem. Math Gr. 6 p.311 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 283-288 5. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 292-297 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 339-345 7. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 311-316 8. Mathematics for Everyone Grade 5. 2000. p. 178* 9. Mathematics for Everyday Use Grade 6. 1999. p. 198* 10. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 311-316	
			58. identifies the base, percentage, and rate in a problem.	**M5NS-IIIa-138**	1. DLP Gr. 6 Module 45 2. Lesson Guide in Elem. Math Gr. 5 p.339	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					3. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 339-345	
			59. finds the percentage in a given problem.	**M5NS-IIIb-139**	1. DLP Gr. 6 Module 46 2. BEAM LG Gr. 6 Module 17 3. Lesson Guide in Elem. Math Gr. 5 p.345 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 288-291 5. Mathematics for Everyone Grade 5. 2000. p. 179* 6. Mathematics for Everyday Use Grade 6. 1999. p. 199* 7. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 345-350 8. Proded Math. 37-A: Finding Percentage	
			60. solves routine and non-routine problems involving percentage using appropriate strategies and tools.	**M5NS-IIIb-140**	1. BEAM LG Gr. 6 Module 17 2. Mathematics for Everyone Grade 5. 2000. pp. 180-182	
			61. creates problems involving percentage, with reasonable answers.	**M5NS-IIIb-141**		
Geometry	demonstrates understanding of polygons, circles, and	is able to construct and describe polygons, circles, and solid	62. visualizes, names, and describes polygons with 5 or more sides.	**M5GE-IIIc-19**	1. DLP Gr. 4 Module 72 2. Lesson Guide in Elem. Math Gr. 5 p.350, 354 3. Lesson Guide in Elem.	Geoboard, 11 x 11

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
	solid figures.	figures.			Mathematics Grade 5. 2005. pp. 292-294; 295-297 4. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 350-357 5. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 354-357 6. NFE Accreditation and Equivalency Learning Material. Geometric Shapes. 2001. pp. 14-15	
			63. describes and compares properties of polygons (regular and irregular polygons).	**M5GE-IIIc-20**		Template, Shapes
			64. draws polygons with 5 or more sides.	**M5GE-IIIc-21**	1. DLP Gr. 5 Module 46 2. BEAM LG Gr. 5 Geometry	
			65. visualizes congruent polygons.	**M5GE-IIId-22**	1. Lesson Guide in Elem. Mathematics Gr. 5. 2005. pp. 297-300 2. Lesson Guide in Elem. Mathematics Gr. 5. 2010. pp. 358-362 3. Lesson Guide in Elem. Mathematics Gr. 5. 2012. pp. 358-362	Geostrips
			66. visualizes and describes a circle.	**M5GE-IIId-23.1**	1. Grade School Mathematics Grade 4. 2003. p. 192*	Compass, blackboard
			67. identifies the terms related to a circle.	**M5GE-IIId-23.2**	1. Mathematics for Everyday Life Grade 4. 2000. pp. 180-181*	Compass, blackboard

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2. Grade School Mathematics Grade 4. 2003. p. 192* 3. Lesson Guide in Elem. Mathematics Grade 4. 2012. pp. 280-284	
			68. draws circles with different radii using a compass.	**M5GE-IIIe-24**		1. Compass, blackboard 2. Compass (For student)
			69. visualizes and describes solid figures.	**M5GE-IIIe-25**	1. Mathematics for Everyone Grade 5. 2000. pp. 188, 190* 2. BALS Video – Shapes and Figures Around Us	
			70. makes models of different solid figures: cube, prism, pyramid, cylinder, cone, and sphere using plane figures.	**M5GE-IIIe-26**		
Patterns and Algebra	demonstrates understanding of the concept of sequence and solving simple equations.	1. is able to apply the knowledge of sequence in various situations. 2. is able to use different problem	71. formulates the rule in finding the next term in a sequence. e.g. 1, 3, 7,15, (15 x 2+1) Possible answers: (x 2 + 1) (+2, +4, +8, +16)	**M5AL-IIIf-6**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
		solving strategies.	72. uses different strategies (looking for a pattern, working backwards, etc.) to solve for the unknown in simple equations involving one or more operations on whole numbers and fractions. e.g. 3 x _ + 1 = 10 (the unknown is solved by working backwards)	**M5AL-IIIf-14**		
Measurement	demonstrates understanding of time and circumference.	is able to apply knowledge of time and circumference in mathematical problems and real-life situations.	73. measures time using a 12-hour and a 24-hour clock.	**M5ME-IIIg-14**	1. NFE Accreditation and Equivalency Learning Material. Time. 2001. pp. 5-13 2. NFE Accreditation and Equivalency Learning Material. Oras. 2001. pp. 5-14	
			74. calculates time in the different world time zones in relation to the Philippines.	**M5ME-IIIg-15**		
			75. solves problems involving time.	**M5ME-IIIg-16**	1. Mathematics for Everyday Life Grade 4. 2000. pp. 199, 202-203* 2. NFE Accreditation and Equivalency Learning Material. Time. 2001. pp. 20-33	
			76. visualizes circumference of a circle.	**M5ME-IIIh-67**	1. BEAM LG Gr. 5 Module 2 – Circumference 2. Mathematics for Everyone Grade 5. 2000. p. 194*	Compass, blackboard

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			77. measures circumference of a circle using appropriate tools.	**M5ME-IIIh-68**	Mathematics for Everyone Grade 5. 2000. pp. 194-196*	1. Meterstick, plastic 2. Ruler, 12" or 30cm 3. Tape Measure, 1.5 meter
			78. derives a formula in finding the circumference of a circle.	**M5ME-IIIi-69**	1. BEAM LG Gr. 5 Module 2 – Circumference 2. Lesson Guide in Elem. Math Gr. 5 p.362 3. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 301-304 4. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 362-366 5. Mathematics for Everyone Grade 5. 2000. p. 195* 6. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 362-366	
			79. finds the circumference of a circle.	**M5ME-IIIi-70**	1. DLP Gr. 5 Module 52 2. BEAM LG Gr. 5 Module 2 – Circumference 3. Lesson Guide in Elem. Math Gr. 5 p.366 4. MISOSA Gr. 5 Module – Circumference of a Circle 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 304-307 6. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 5. 2010. pp. 366-369 7. Mathematics for Everyone Grade 5. 2000. pp. 196-197* 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 366-369 9. NFE Accreditation and Equivalency Learning Material. Measurement, Perimeter and Circumference. 2001. pp. 20-24	
			80. solves routine and non-routine problems involving circumference of a circle.	**M5ME-IIIj-71**	1. BEAM LG Gr. 5 Module 2 – Circumference 2. Lesson Guide in Elem. Math Gr. 5 p.369 3. MISOSA Gr. 5 Module – Word Problems on Circumference 4. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 307-309 5. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 369-372 6. Mathematics for Everyone Grade 5. 2000. pp. 198-199* 7. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 369-372	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 5- FOURTH QUARTER						
Measurement	demonstrates understanding of area, volume and temperature.	is able to apply knowledge of area, volume and temperature in mathematical problems and real-life situations.	81. visualizes area of a circle.	**M5ME-IVa-72**	1. BEAM LG Gr. 5 Module 14 – Area 2. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 382-386	1. Compass, blackboard 2. Circle Area Demonstrator
			82. derives a formula in finding the area of a circle .	**M5ME-IVa-73**	1. DLP Gr. 5 Module 49 2. BEAM LG Gr. 5 Module 14 – Area 3. Lesson Guide in Elem. Math Gr. 5 p.382 4. MISOSA Gr. 5 Module – Area of a Circle	
			83. finds the area of a given circle.	**M5ME-IVa-74**	1. DLP Gr. 5 Module 53 2. BEAM LG Gr. 5 Module 14 – Area 3. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 317-320 4. Lesson Guide in Elem. Math Gr. 5. 2012. pp. 382-386	
			84. solves routine and non-routine problems involving the area of a circle.	**M5ME-IVb-75**		
			85. creates problems involving a circle, with reasonable answers.	**M5ME-IVb-76**		
			86. visualizes the volume of a cube and rectangular prism.	**M5ME-IVc-77**	1. Lesson Guide in Elem. Math Gr. 5 p. 389, Gr. 6 p. 384 2. Mathematics for Everyone Grade 5. 2000. p. 206* 3. BALS Video – Lesson 1: Units of Volume	1. Models Of Deriving Formula For Volume: 1000 pcs – 1 cm linking plastic cubes

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
						2. Volume demonstrator set: Includes the following: Cylinder and Cone Volume Comparing Tool, Quadrangular Volume Demonstrator
			87. names the appropriate unit of measure used for measuring the volume of a cube and a rectangle prism.	**M5ME-IVc-78**	1. Lesson Guide in Elem. Math Gr. 6 p.391 2. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 323-325 3. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 389-391 4. Mathematics for Everyone Grade 5. 2000. p. 206* 5. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 389-391 6. BALS Video – Lesson 2: Measuring Volume	
			88. derives the formula in finding the volume of a cube and a rectangular prism using cubic cm and cubic m.	**M5ME-IVc-79**	1. DLP Gr. 6 Module 57 2. Lesson Guide in Elem. Math Gr. 5 p.392, Gr. 6 p. 388 3. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 395-399 4. Lesson Guide in Elem. Mathematics Grade 6.	Basic 3-Dimensional Models

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2010. pp. 391-394 5. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 395-399 6. BALS Video – Lesson 2: Measuring Volume	
			89. converts cu. cm to cu. m and vice versa; cu.cm to L and vice versa.	**M5ME-IVd-80**	1. DLP Gr. 5 Module 54 2. BEAM LG Gr. 5 Module 18 – Volume 3. Lesson Guide in Elem. Math Gr. 5 p.395 4. MISOSA Gr. 5 Module – Volume of a Rectangular Prism 5. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 325-327 6. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 392-395 7. Lesson Guide in Elem. Mathematics Grade 6. 2010. pp. 388-390 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 392-395 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 388-390	
			90. finds the volume of a given cube and rectangular prism using cu. cm and cu. m.	**M5ME-IVd-81**	1. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 328-331 2. Lesson Guide in Elem. Mathematics Grade 6. 2005. pp. 370-373 3. Mathematics for	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Everyone Grade 5. 2000. pp. 210-211* 4. Lesson Guide in Elementary Mathematics Grade 6. 2012. pp. 391-394 5. BALS Video – Lesson 2: Measuring Volume	
			91. estimates and uses appropriate units of measure for volume.	**M5ME-IVd-82**	1. DLP Gr. 5 Module 55 2. BEAM LG Gr. 5 Module 18 – Volume 3. Lesson Guide in Elem. Math Gr. 5 p. 399 4. BALS Video – Lesson 1: Units of Volume	
			92. solves routine and non-routine problems involving volume of a cube and rectangular prism in real-life situations using appropriate strategies and tools.	**M5ME-IVe-83**	1. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 332-334 2. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 399-402 3. Mathematics for Everyone Gr. 5. 2000. pp. 212-213* 4. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 399-402 5. BALS Video – Lesson 2: Measuring Volume	
			93. creates problems (with reasonable answers) involving volume of a cube and rectangular prism in real-life situations.	**M5ME-IVe-84**	1. DLP Gr. 5 Module 56 2. BEAM LG Gr. 5 Module 19 – Temperature 3. Lesson Guide in Elem. Math Gr. 5 p.305	
			94. reads and measures temperature using	**M5ME-IVf-85**	1. Lesson Guide in Elem. Mathematics Grade 5.	1. Clinical Thermometer,

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			thermometer (alcohol and/or digital) in degree Celsius.		2005. pp. 336-339 2. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 405-408 3. Mathematics for Everyday Life Grade 4. 2000. pp. 204-205* 4. Grade School Mathematics Grade 4. 2003. pp. 218-219* 5. Mathematics for Everyone Gr. 5. 2000. pp. 214-215* 6. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 402-408	digital 2. Thermometer, Alcohol, -20^{O}C to 110^{O}C
			95. estimates the temperature(e.g. inside the classroom).	**M5ME-IVf-86**	1. DLP Gr. 5 Module 57 2. BEAM LG Gr. 5 Module 19 – Temperature 3. Lesson Guide in Elem. Math Gr. 5 p.409 4. MISOSA Gr. 5 Module – Temperature	
			96. solves routine and non-routine problems involving temperature in real-life situations.	**M5ME-IVf-87**	1. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 339-342 2. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 409-412 3. Mathematics for Everyday Life Grade 4. 2000. pp. 206-207* 4. Grade School Mathematics Grade 4. 2003. pp. 219, 221* 5. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 5. 2012. pp. 409-412	
			97. creates problems involving temperature, with reasonable answers.	**M5ME-IVg-88**		
Statistics and Probability	demonstrates understanding of line graphs and experimental probability.	is able to create and interpret representations of data (tables and line graphs) and apply experimental probability in mathematical problems and real-life situations.	98. collects data on one to two variables using any source.	**M5SP-IVg-1.5**	1. BEAM LG Gr. 5 Module 20 – Line Graph 2. Lesson Guide in Elem. Math Gr. 5 p.417 3. MISOSA Gr. 5 Module – Line Graph	
			99. organizes data in tabular form and presents them in a line graph.	**M5SP-IVg-2.5**	1. DLP Gr. 5 Module 58, 59 2. BEAM LG Gr. 5 Module 20 – Line Graph 3. Lesson Guide in Elem. Math Gr. 5 p.412 4. Lesson Guide in Elem. Mathematics Gr. 5. 2012. pp. 417-421	
			100. interprets data presented in different kinds of line graphs (single to double-line graph).	**M5SP-IVh-3.5**	1. Lesson Guide in Elem. Mathematics Grade 5. 2005. pp. 342-346 2. Lesson Guide in Elem. Mathematics Grade 5. 2010. pp. 412-417 3. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 412-417	
			101. solves routine and non-routine problems using data presented in a line graph.	**M5SP-IVh-4.5**		
			102. draws inferences based on data presented in a line graph.	**M5SP-IVh-5.5**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			103. describes experimental probability.	**M5SP-IVi-14**		
			104. performs an experimental probability and records result by listing.	**M5SP-IVi-15**		Calculator, Scientific
			105. analyzes data obtained from chance using experiments involving letter cards (A to Z) and number cards (0 to 20).	**M5SP-IVi-16**		
			106. solves routine and non-routine problems involving experimental probability.	**M5SP-IVj-17**		
			107. creates routine and non-routine problems involving experimental probability.	**M5SP-IVj-18**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
Grade 6- FIRST QUARTER						
Numbers and Number Sense	demonstrates understanding of the four fundamental operations involving fractions and decimals.	is able to apply the four fundamental operations involving fractions and decimals in mathematical problems and real-life situations.	1. adds and subtracts simple fractions and mixed numbers without or with regrouping.	**M6NS-Ia-86**	1. Lesson Guide in Elem. Math Gr. 6 p. 203, 207, 212, 216, 219, 223 2. DLP Gr. 6 Module 31, 32 3. BEAM LG Gr. 6 Module 8A 4. MISOSA Modules Gr.5 and 6– Subtraction of Mixed Numbers 5. Lesson Guide in Elementary Math Grade 6. 2005. pp. 193-211 6. Lesson Guide in Elementary Math Grade 6. 2010. pp. 203-227 7. Proded Math. 33A: Adding and Subtracting Similar Fractions 8. Proded Math. 33C: Add and Subtract Mixed Numbers (Similar Fractions) 9. Proded Math. 34-A, 34-B & 34-C: Adding Dissimilar Fractions 10. Mathematics for Everyone Grade 5.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2000. pp. 94-95* 11. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 203-227 12. Proded Math. III-A: Adding and Subtracting Similar Fractions 13. Proded Math. III-B: Add and Subtract Fractions and Wholes 14. Proded Math. III-C: Add and Subtract Mixed Numbers	
			2. solves routine and non-routine problems involving addition and/or subtraction of fractions using appropriate problem solving strategies and tools.	**M6NS-Ia-87.3**	1. Lesson Guide in Elem. Math Gr. 6 p.232 2. BEAM LG Gr. 6 Module 8B 3. MISOSA Module Gr.6 –Word Problems on Subtraction of Fractions 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 219-221 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 232-237 6. Mathematics for Everyone Grade 5. 2000. pp. 96-97, 106-109* 7. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 6. 2012. pp. 232-237 8. NFE Accreditation and Equivalency Learning Material. Addition and Subtraction of a Fraction. 1998. pp. 18-25	
			3. creates problems (with reasonable answers) involving addition and/or subtraction of fractions.	**M6NS-Ia-88.3**		
			4. multiplies simple fractions and mixed fractions.	**M6NS-Ib-90.2**	1. Lesson Guide in Elem. Math Gr. 5 p.203, 209, Gr. 6 p. 237, 250 2. DLP Gr. 5 Module 24, 26, Gr. 6 Module 35 3. BEAM LG Gr. 5 Module 9, Gr. 6 Module 9 4. MISOSA Module Gr.5 and 6– Multiplication of Mixed Numbers and Fractions 5. Lesson Guide in Elementary Math Grade 6. 2005. pp. 234-237 6. Mathematics for Everyday Use Grade 6. 1999. pp. 124-126* 7. Mathematics for Everyone Grade 5. 2000. pp 118-119 8. Lesson Guide in Elem. Mathematics Grade 5.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 196-213 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 237-244, 250-253 10. BALS Video – Lesson 2: Multiplication and Division of Mixed Numbers	
			5. solves routine or non-routine problems involving multiplication without or with addition or subtraction of fractions and mixed fractions using appropriate problem solving strategies and tools.	**M6NS-Ib-92.2**	1. Lesson Guide in Elem. Math Gr. 5 p.213, Gr. 6 p. 262 2. DLP Gr. 5 Module 27, 28, Gr. 6 Module 36, 37 3. BEAM LG Gr. 5 Module 9, Gr. 6 Module 9 4. MISOSA Module Gr.6 –Word Problems on Multiplication of Fractions 5. Lesson Guide in Elementary Math Grade 6. 2005. pp. 242-249 6. Mathematics for Everyday Use Grade 6. 1999. pp. 126, 131-133* 7. Mathematics for Everyone Grade 5. 2000. pp. 120-121* 8. Lesson Guide in Elem. Mathematics Grade 5.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 213-217 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 258-265	
			6. creates problems (with reasonable answers) involving multiplication without or with addition or subtraction of fractions and mixed fractions.	**M6NS-Ib-93.2**		
			7. divides simple fractions and mixed fractions.	**M6NS-Ic-96.2**	1. Lesson Guide in Elem. Math Gr. 6 p.273, 277 2. BEAM LG Gr. 6 Module 10 3. MISOSA Module Gr.6 – Division of Mixed Numbers 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 260-265 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 273-282 6. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 270-282 7. BALS Video – Lesson 2: Multiplication and Division of Mixed Numbers	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			8. solves routine or non-routine problems involving division without or with any of the other operations of fractions and mixed fractions using appropriate problem solving strategies and tools.	**M6NS-Ic-97.2**	1. Lesson Guide in Elem. Math Gr. 6 p.282, 286 2. DLP Gr. 6 Module 40, 41 3. BEAM LG Gr. 6 Module 10 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 266-273 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 282-289 6. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 282-289	
			9. creates problems (with reasonable answers) involving division without or with any of the other operations of fractions and mixed fractions.	**M6NS-Ic-98.2**		
			10. adds and subtracts decimals and mixed decimals through ten thousandths without or with regrouping.	**M6NS-Id-106.2**	1. Lesson Guide in Elem. Math Gr. 6 p.54, 56, 60, 62 2. DLP Gr. 6 Module 10, 11 3. BEAM LG Gr. 6 Module on Addition and Subtraction of Decimals 4. MISOSA Modules Gr.5 –Addition and Subtraction of Mixed Decimals 5. MISOSA Module Gr.6	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					–Subtraction of Mixed Decimals 6. Lesson Guide in Elementary Math Grade 6. 2005. pp. 53-61 7. Lesson Guide in Elementary Math Grade 6. 2010. pp. 54-65 8. Mathematics for Everyday Use Grade 6. 1999. pp. 159-168* 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 50-65 10. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng Desimal. 2001. pp. 19-21, 27-32	
			11. solves 1 or more steps routine and non-routine problems involving addition and/or subtraction of decimals and mixed decimals using appropriate problem solving strategies and tools.	**M6NS-Id-108.2**	1. Lesson Guide in Elem. Math Gr. 6 p.68 2. DLP Gr. 6 Module 12, 17 3. BEAM LG Gr. 6 Module on Addition and Subtraction of Decimals 4. MISOSA Module Gr.5 –Word problems on Addition and Subtraction of Decimals	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					5. Lesson Guide in Elementary Math Grade 6. 2005. pp. 64-66 6. Lesson Guide in Elementary Math Grade 6. 2010. pp. 68-70 7. Mathematics for Everyday Use Grade 6. 1999. pp. 169-171* 8. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 68-70 9. NFE Accreditation and Equivalency Learning Material. Pagdaragdag at Pagbabawas ng Desimal. 2001. pp. 22-26	
			12. creates problems (with reasonable answers) involving addition and/or subtraction of decimals and mixed decimals.	**M6NS-Id-109.2**		
			13. multiplies decimals and mixed decimals with factors up to 2 decimal places.	**M6NS-Ie-111.3**	1. Lesson Guide in Elem. Math Gr. 5 p. 289, Gr. 6 p.73, 76, 80, 83 2. DLP Gr. 5 Module 37, 38, Gr. 6 Module 15 3. MISOSA Module Gr.5 and 6 –Multiplication of Mixed Decimals; Decimals through Hundredths 4. Lesson Guide in Elementary Math	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Grade 6. 2005. pp. 75-78 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 80-86 6. Proded Math. 36-A: Multiplying Decimals 7. Proded Math. 36-B: Multiplying More Decimals 8. Proded Math. 36-C: Multiplying Mixed Decimals 9. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 289-293 10. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 73-76, 80-86 11. NFE Accreditation and Equivalency Learning Material. Multiplication and Division of Decimals. 2001. pp. 4-16	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			14. multiplies mentally decimals up to 2 decimals places by 0.1, 0.01,10, and 100.	**M6NS-Ie-111.4**	1. Lesson Guide in Elem. Math Gr. 5 p. 293, Gr. 6 p.86 2. DLP Gr. 5 Module 40 3. BEAM LG Gr. 6 Module 4 4. MISOSA Modules Gr.5 –Multiplication of Decimals by 10 and 100, by 0.1, 0.01, and 0.001 5. Lesson Guide in Elementary Math Grade 6. 2005. pp. 81-84 6. Lesson Guide in Elementary Math Grade 6. 2010. pp. 86-89 7. Mathematics for Everyday Use Grade 6. 1999. pp. 178-180* 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 293-297 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 86-89*	
			15. solves routine and non-routine problems involving multiplication of decimals and mixed decimals including money using appropriate problem solving strategies.	**M6NS-Ie-113.2**	1. Lesson Guide in Elem. Math Gr. 5 p.301, Gr. 6 p.93 2. DLP Gr. 6 Module 41 3. BEAM LG Gr. 5 Module 12 4. Lesson Guide in Elementary Math	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Grade 6. 2005. pp. 88-91 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 93-96 6. Mathematics for Everyday Use Grade 6. 1999. pp. 181-182* 7. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 301-305 8. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 93-96 9. NFE Accreditation and Equivalency Learning Material. Multiplication and Division of Decimals. 2001. pp. 17-21	
			16. solves multi-step problems involving multiplication and addition or subtraction of decimals, mixed decimals and whole numbers including money using appropriate problem solving strategies and tools.	**M6NS-If-113.3**	1. Lesson Guide in Elem. Math Gr. 6 p.96 2. Lesson Guide in Elementary Math Grade 6. 2005. pp. 91-94 3. Lesson Guide in Elementary Math Grade 6. 2010. pp. 96-100 4. Mathematics for Everyday Use Grade 6. 1999. pp. 182-185* 5. Lesson Guide in Elem. Mathematics Grade 6.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 96-100	
			17. creates problems (with reasonable answers) involving multiplication without or with addition or subtraction of decimals, mixed decimals and whole numbers including money.	**M6NS-If-114**		
			18. divides whole numbers by decimals up to 2 decimal places and vice versa.	**M6NS-Ig-116.3**	1. Lesson Guide in Elem. Math Gr.5 p.310, Gr. 6 p.103, 105, 117 2. DLP Gr. 6 Module 19 3. BEAM LG Gr. 6 Module 5- Division of Decimals 4. MISOSA Module Gr.5 and 6 –Division of Decimals by Whole Numbers 5. Lesson Guide in Elementary Math Grade 6. 2005. pp. 97-103 6. Lesson Guide in Elementary Math Grade 6. 2010. pp. 103-109; 117-121 7. Mathematics for Everyday Use Grade 6. 1999. pp. 186-187* 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 310-314 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 103-109,	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					117-121	
			19. divides decimals/mixed decimals up to 2 decimal places.	**M6NS-Ig-116.4**	1. Lesson Guide in Elem. Math Gr. 6 p.121 2. DLP Gr. 6 Module 20 3. BEAM LG Gr. 6 Module 5- Division of Decimals 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 115-118 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 125-127 6. Mathematics for Everyone Grade 5. 2000. pp. 162-163* 7. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 314-318 8. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 121-125 9. NFE Accreditation and Equivalency Learning Material. Multiplication and Division of Decimals. 2001. pp. 22-32	
			20. divides decimals up to 4 decimal places by 0.1, 0.01, and 0.001.	**M6NS-Ih-116.5**	1. Lesson Guide in Elem. Math Gr. 6 p.127 2. BEAM LG Gr. 6 Module 5- Division of Decimals 3. Lesson Guide in	Base 10 Blocks

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Elementary Math Grade 6. 2005. pp. 121-123 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 127-130 5. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 127-130	
			21. divides decimals up to 2 decimal places by 10, 100, and 1 000 mentally.	**M6NS-Ih-118**	1. Lesson Guide in Elem. Math Gr. 6 p.125 2. BEAM LG Gr. 6 Module 5- Division of Decimals 3. Lesson Guide in Elementary Math Grade 6. 2005. pp. 119-120 4. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 125-127	
			22. differentiates terminating from repeating, non-terminating decimal quotients.	**M6NS-Ii-119**	1. Lesson Guide in Elem. Math Gr. 6 p.111 2. MISOSA Module Gr.6 –Repeating and Terminating Decimals 3. Lesson Guide in Elementary Math Grade 6. 2005. pp. 105-108 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 111-114 5. Lesson Guide in Elem.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Mathematics Grade 6. 2012. pp. 111-114	
			23. solves routine and non-routine problems involving division of decimals, mixed decimals, and whole numbers including money using appropriate problem solving strategies and tools.	**M6NS-Ii-120.2**	1. Lesson Guide in Elem. Math Gr. 5 p. 318, Gr. 6 p.130 2. DLP Gr. 6 Module 21 3. BEAM LG Gr. 6 Module 5- Division of Decimals 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 123-126 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 130-133 6. Mathematics for Everyday Use Grade 6. 1999. pp. 194-195* 7. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 318-321 8. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 130-133 9. NFE Accreditation and Equivalency Learning Material. Multiplication and Division of Decimals. 2001. pp. 32-41	
			24. solves multi-step routine and non-routine problems involving division and any of the other operations of decimals, mixed	**M6NS-Ij-120.3**	1. Lesson Guide in Elem. Math Gr. 6 p.133 2. Lesson Guide in Elementary Math	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			decimals, and whole numbers including money using appropriate problem solving strategies and tools.		Grade 6. 2005. pp. 126-129 3. Lesson Guide in Elementary Math Grade 6. 2010. pp. 133-136 4. Mathematics for Everyday Use Grade 6. 1999. pp. 196-197* 5. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 133-136	
			25. creates problems (with reasonable answers) involving division without or with any of the other operations of decimals, mixed decimals and whole numbers including money.	**M6NS-Ij-121.2**		
Grade 6- SECOND QUARTER						
Numbers and Number Sense	demonstrates understanding of order of operations, ratio and proportion, percent, exponents, and integers.	is able to apply knowledge of order of operations, ratio and proportion, percent, exponents, and integers in mathematical problems and real-life situations.	26. expresses one value as a fraction of another given their ratio and vice versa.	**M6NS-IIa-129**		
			27. finds how many times one value is as large as another given their ratio and vice versa.	**M6NS-IIa-130**		
			28. defines and illustrates the meaning of ratio and proportion using concrete or pictorial models.	**M6NS-IIb-131**		
			29. sets up proportions for groups of objects or numbers and for given situations.	**M6NS-IIb-132**	1. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 289-293	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			30. finds a missing term in a proportion (direct, inverse, and partitive).	**M6NS-IIb-133**	1. Lesson Guide in Elem. Math Gr. 6 p.301, 304, 307 2. BEAM LG Gr. 6 Module 11 3. MISOSA Module Gr.6 –Word Problems on Direct, Partitive and Inverse Proportion 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 280-283 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 301-310 6. Mathematics for Everyday Use Grade 6. 1999. pp. 146-150* 7. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 297-301	
			31. solves problems involving direct proportion, partitive proportion, and inverse proportion in different contexts such as distance, rate, and time using appropriate strategies and tools.	**M6NS-IIc-134**	1. Lesson Guide in Elementary Math Grade 6. 2005. pp. 284-292 2. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 301-310	
			32. creates problems involving ratio and proportion, with reasonable answers.	**M6NS-IIc-135**		
			33. finds the percentage or rate or percent in a given problem.	**M6NS-IId-142**	1. Lesson Guide in Elem. Math Gr. 6 p.316,	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					320, 323 2. DLP Gr. 6 Module 47, 48, 49 3. MISOSA Module Gr.6 – Finding the Percentage, Rate and Base 4. Proded Math. 37-A: Finding Percentage 5. Proded Math. 37-B: Finding Rate 6. Proded Math. 37-C: Finding the Base 7. Mathematics for Everyday Use Grade 6. 1999. pp. 198-199, 202-203 8. Lesson Guide in Elem. Mathematics Grade 5. 2012. pp. 345-350 9. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 316-328	
			34. solves routine and non-routine problems involving finding the percentage, rate and base using appropriate strategies and tools.	**M6NS-IId-143**	1. MISOSA Module Gr.6 – Word Problems on Percentage 2. Mathematics for Everyday Use Grade 6. 1999. p. 199, 203*	
			35. solves percent problems such as percent of increase/decrease (discounts, original price, rate of discount, sale price, marked-up price), commission, sales tax, and simple interest.	**M6NS-IIe-144**	1. Lesson Guide in Elem. Math Gr. 6 p.332, 336, 340, 344 2. DLP Gr. 6 Module 50, 51, 52 3. BEAM LG Gr. 6 Module 17	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 313-324 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 332-347 6. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 332-347 7. NFE Accreditation and Equivalency Learning Material. Business Math. 2001. pp. 4-7, 23-30 8. NFE Accreditation and Equivalency Learning Material. Percentage, Ratio and Proportion. 1998. pp. 4-8, 14-21 9. BALS Video – Lesson 1: Solving Percentage Problems	
			36. creates problems involving percent, with reasonable answers.	**M6NS-IIe-145**		
			37. describes the exponent and the base in a number expressed in exponential notation.	**M6NS-IIf-146**	1. Lesson Guide in Elem. Math Gr. 6 p.6 2. DLP Gr. 6 Module 1 3. MISOSA Module Gr.6 –Exponents 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 6-9	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					5. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 6-9	
			38. gives the value of numbers expressed in exponential notation.	**M6NS-IIf-147**	1. Lesson Guide in Elem. Math Gr. 6 p.9 2. DLP Gr.4 Module 32 3. MISOSA Module Gr.6 –Expressions involving Exponents 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 9-12 5. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 9-12	
			39. interprets and explains the Grouping, Exponent, Multiplication, Division, Addition, Subtraction (GEMDAS) rule.	**M6NS-IIf-148**	DLP Gr. 6 Module 2	
			40. performs two or more different operations on whole numbers with or without exponents and grouping symbols.	**M6NS-IIf-149**	1. Lesson Guide in Elem. Math Gr. 6 p.13, 17, 21, 25, 28 2. BEAM LG Gr. 6 Module 1 – Order of Operations 3. MISOSA Modules Gr.6 – Evaluating Expressions 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 13-28 5. Lesson Guide in Elem. Mathematics Grade 6.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 13-28	
			41. identifies real-life situations that make use of integers.	**M6NS-IIg-150**		
			42. describes the set of integers.	**M6NS-IIg-151**		
			43. compares integers with other numbers such as whole numbers, fractions, and decimals.	**M6NS-IIg-152**	Lesson Guide in Elem. Math Gr. 6. 2012. pp. 356-358	
			44. represents integers on the number line.	**M6NS-IIh-153**	1. Lesson Guide in Elem. Math Gr. 6 p.353 2. Lesson Guide in Elementary Math Grade 6. 2010. pp. 353-356 3. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 353-356	Thermometer, Alcohol, -20^{O}C to 110^{O}C
			45. compares and arranges integers.	**M6NS-IIh-154**	1. Lesson Guide in Elem. Math Gr. 6 p.356, 358 2. DLP Gr. 6 Module 68, 69 3. BEAM LG Gr. 6 Module 18 – Expression and Integers 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 336-341 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 356-360 6. Lesson Guide in Elem. Mathematics Grade 6.	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 358-360	
			46. describes and interprets the basic operations on integers using materials such as algebra tiles, counters, chips, and cards.	**M6NS-IIh-155**		
			47. performs the basic operations on integers.	**M6NS-IIi-156**		
			48. solves routine and non-routine problems involving basic operations of integers using appropriate strategies and tools.	**M6NS-IIj-157**		
Grade 6- THIRD QUARTER						
Geometry	demonstrates understanding of solid figures.	is able to construct and describe the different solid figures: cube, prism, pyramid, cylinder, cone, and sphere.	49. visualizes and describes the different solid figures: cube, prism, pyramid, cylinder, cone, and sphere.	**M6GE-IIIa-27**	1. BEAM LG Gr. 6 Module 15 2. Mathematics for Everyone Grade 5. 2000. pp. 188-190* 3. NFE Accreditation and Equivalency Learning Material. Geometric Shapes. 2001. pp. 19-25	
			50. differentiates solid figures from plane figures.	**M6GE-IIIa-28**		Blackboard Triangles Set (30° x 60° and 45° x 45°)
			51. illustrates the different solid figures using various concrete and pictorial models.	**M6GE-IIIb-29**		
			52. identifies the faces of a solid figure.	**M6GE-IIIb-30**	DLP Gr. 6 Module 54	
			53. visualizes and describes the different solid figures: cube, prism, pyramid, cylinder, cone, and sphere.	**M6GE-IIIc-31**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			54. identifies the nets of the following space figures: cube, prism, pyramid, cylinder, cone, and sphere using plane figures.	**M6GE-IIIc-32**		
Patterns and Algebra	demonstrates understanding of sequence in forming rules, expressions and equations.	is able to apply knowledge of sequence, expressions, and equations in mathematical problems and real-life situations.	55. formulates the rule in finding the **nth term** using different strategies (looking for a pattern, guessing and checking, working backwards) e.g. 4,7,13,16,…n (the nth term is 3n+1)	**M6AL-IIId-7**		
			56. differentiates expression from equation.	**M6AL-IIId-15**	1. Lesson Guide in Elem. Math Gr. 6 p.1, 3 2. BEAM LG Gr. 6 Module 18 – Expression and Integers 3. Lesson Guide in Elementary Math Grade 6. 2005. pp. 1-3 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 1-3 5. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 1-5	
			57. gives the translation of real-life verbal expressions and equations into letters or symbols and vice versa.	**M6AL-IIIe-16**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			58. defines a variable in an algebraic expression and equation.	**M6AL-IIIe-17**		
			59. represents quantities in real-life situations using algebraic expressions and equations.	**M6AL-IIIe-18**		
			60. solves routine and non-routine problems involving different types of numerical expressions and equations such as 7+ 9 =___ + 6.	**M6AL-IIIf-19**	DLP Gr. 6 Module 70, 71	
			61. creates routine and non-routine problems involving numerical expressions and equations.	**M6AL-IIIf-20**		
Measurement	demonstrates understanding of rate and speed, and of area and surface area of plane and solid/space figures.	is able to apply knowledge of speed, area, and surface area of plane and solid/space figures in mathematical problems and real-life situations	62. calculates speed, distance, and time.	**M6ME-IIIg-17**	1. NFE Accreditation and Equivalency Learning Material. Time. 2001. pp. 20-33 2. NFE Accreditation and Equivalency Learning Material. Oras. 2001. pp. 21-35	
			63. solves problems involving average rate and speed.	**M6ME-IIIg-18**		
			64. finds the area of composite figures formed by any two or more of the following: triangle, square, rectangle, circle, and semi-circle.	**M6ME-IIIh-89**		1. Circle Area Demonstrator 2. Geoboard, 5 x 5 3. Geoboard, 11 x 11
			65. solves routine and non-routine problems involving area of composite figures formed by any two or more of the	**M6ME-IIIh-90**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			following: triangle, square, rectangle, circle, and semi-circle.			
			66. visualizes and describes surface area and names the unit of measure used for measuring the surface area of solid/space figures.	**M6ME-IIIi-91**	1. Lesson Guide in Elem. Math Gr. 6 p.371 2. Lesson Guide in Elementary Math Grade 6. 2010. pp. 371-373 3. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 371-373	1. Meterstick, plastic 2. Ruler, 12" or 30cm 3. Tape Measure, 1.5 meter
			67. derives a formula for finding the surface area of cubes, prisms, pyramids, cylinders, cones, and spheres.	**M6ME-IIIi-92**	1. Lesson Guide in Elem. Math Gr. 6 p.369, 381 2. DLP Gr. 6 Module 55 3. BEAM LG Gr. 6 Module 16 – Surface Area 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 348-350 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 369-371; 381-384	Sphere with 32 Movable Segments
			68. finds the surface area of cubes, prisms, pyramids, cylinders, cones, and spheres.	**M6ME-IIIi-93**	1. BEAM LG Gr. 6 Module 16 – Surface Area 2. MISOSA Module Gr.6 – Surface Area on Cube, Rectangular Prism, Pyramid and Cylinder	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			69. solves word problems involving measurement of surface area.	**M6ME-IIIj-94**	1. DLP Gr. 6 Module 56 2. BEAM LG Gr. 6 Module 17 – Surface Area	
Grade 6- FOURTH QUARTER						
Measurement	demonstrates understanding of volume of solid figures and meter reading.	is able to apply knowledge of volume of solid figures and meter reading in mathematical problems and real-life situations.	70. determines the relationship of the volume between 70.1 a rectangular prism and a pyramid; 70.2 a cylinder and a cone; 70.3 and a cylinder and sphere.	**M6ME-IVa-95**		Volume Demonstrator Set Includes the following: Cylinder and Cone Volume Comparing Tool, Quadrangular Volume Demonstrator
			71. derives the formula for finding the volume of cylinders, pyramids, cones, and spheres.	**M6ME-IVa-96**	1. DLP Gr. 6 Module 58 2. BEAM LG Gr. 6 Module 18 – Volume 3. Lesson Guide in Elementary Math Grade 6. 2005. pp. 373-381	1. Basic 3-Dimensional Models 2. Sphere with 32 Movable Segments
			72. finds the volume of cylinders, pyramids, cones, and spheres.	**M6ME-IVb-97**	1. Lesson Guide in Elem. Math Gr. 6 p.394, 398 2. BEAM LG Gr. 6 Module 18 – Volume 3. MISOSA Module Gr.6 – Volume of Rectangular Prism, Pyramid and Cylinder 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 394-402 5. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 394-402	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			73. solves routine and non-routine problems involving volumes of solids.	**M6ME-IVc-98**	1. Lesson Guide in Elem. Math Gr. 6 p.402 2. DLP Gr. 6 Module 59 3. BEAM LG Gr. 6 Module 19 – Volume 4. Lesson Guide in Elementary Math Grade 6. 2010. pp. 402-406 5. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 402-406	
			74. creates problems involving surface area and volume of solid/space figures, with reasonable answers.	**M6ME-IVc-99**		
			75. reads and interprets electric and water meter readings.	**M6ME-IVd-100**	1. Lesson Guide in Elem. Math Gr. 6 p.406, 409 2. DLP Gr. 6 Module 60, 61 3. BEAM LG Gr. 6 Module 20 – Meter Reading 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 385-390 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 406-412 6. Mathematics for Everyday Use Grade 6. 1999. pp. 252-253* 7. Lesson Guide in Elem. Mathematics Grade 6.	1. Manipulative Electricity Consumption Meter Model, blackboard 2. Manipulative Water Consumption Meter Model, blackboard

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					2012. pp. 406-412 8. NFE Accreditation and Equivalency Learning Material. Interpreting Electric Meters and Bills. 2001. pp. 5-18 9. BALS Video – Lesson 1: How to Read and Interpret the Electric Meter	
			76. solves routine and non-routine problems involving electric and water consumption.	**M6ME-IVd-101**	1. Lesson Guide in Elem. Math Gr. 6 p.412, 415 2. DLP Gr. 6 Module 62 3. BEAM LG Gr. 6 Module 20 – Meter Reading 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 391-397 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 412-418 6. Mathematics for Everyday Use Gr. 6. 1999. pp. 254-255* 7. Lesson Guide in Elem. Mathematics Grade 6. 2012. pp. 412-418 8. NFE Accreditation and Equivalency Learning Material. Interpreting Electric Meters and Bills. 2001. pp. 19-25	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
			77. creates problems involving electric and water consumption, with reasonable answers.	**M6ME-IVd-102**		
Statistics and Probability	demonstrates understanding of pie graphs and experimental probability.	is able to create and interpret representations of data (tables and pie graphs) and apply experimental probability in mathematical problems and real-life situations.	78. collects data on one or two variables using any source.	**M6SP-IVe-1.6**		
			79. constructs a pie graph based on a given set of data.	**M6SP-IVe-2.6**	1. Lesson Guide in Elem. Math Gr. 6 p.426 2. DLP Gr. 6 Module 65 3. BEAM LG Gr. 6 Module 21 – Circle Graphs 4. MISOSA Module Gr.6 – Constructing Circle Graph 5. Lesson Guide in Elementary Math Grade 6. 2005. pp. 404-408 6. Lesson Guide in Elementary Math Grade 6. 2010. pp. 426-430 7. Mathematics for Everyday Use Grade 6. 1999. pp. 268-272*	
			80. interprets data presented in a pie graph.	**M6SP-IVf-3.6**	1. Lesson Guide in Elem. Math Gr. 6 p.422 2. DLP Gr. 6 Module 64 3. BEAM LG Gr. 6 Module 21 – Circle Graphs 4. MISOSA Module Gr.6 –Interpreting Circle Graph 5. Lesson Guide in	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	The learner…	The learner…			
					Elementary Math Grade 6. 2005. pp. 400-404 6. Lesson Guide in Elementary Math Grade 6. 2010. pp. 422-426 7. Mathematics for Everyday Use Grade 6. 1999. pp. 264-265*	
			81. solves routine and non-routine problems using data presented in a pie graph.	**M6SP-IVf-4.6**	1. Mathematics for Everyday Use Grade 6. 1999. pp. 265-267*	
			82. creates problems that can be answered using information presented in a pie graph.	**M6SP-IVg-6**		
			83. describes the meaning of probability such as 50% chance of rain and one in a million chance of winning.	**M6SP-IVg-19**		
			84. quantifies the phrases "most likely to happen" and "unlikely to happen".	**M6SP-IVh-20**		
			85. performs experiments and records outcomes.	**M6SP-IVh-21**	1. Lesson Guide in Elem. Math Gr. 6 p.349 2. BEAM LG Gr. 6 Module 17 – Prediction and Outcome 3. Lesson Guide in Elementary Math Grade 6. 2010. pp. 350-353	Calculator, Scientific

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS	MATH EQUIPMENT
	The learner…	**The learner…**	**The learner…**			
			86. makes listings and diagrams of outcomes and tells the number of favorable outcomes and chances using these listings and diagrams.	**M6SP-IVi-22**	1. BEAM LG Gr. 6 Module 17 – Prediction and Outcome	
			87. makes simple predictions of events based on the results of experiments.	**M6SP-IVi-23**	1. Lesson Guide in Elem. Math Gr. 6 p.347 2. DLP Gr. 6 Module 67 3. BEAM LG Gr. 6 Module 17 – Prediction and Outcome 4. Lesson Guide in Elementary Math Grade 6. 2005. pp. 328-330 5. Lesson Guide in Elementary Math Grade 6. 2010. pp. 347-349	
			88. solves routine and non-routine problems involving experimental and theoretical probability.	**M6SP-IVj-24**		
			89. creates problems involving experimental and theoretical probability.	**M6SP-IVj-25**		

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	**The learner…**	**The learner…**		
Grade 7- FIRST QUARTER					
Numbers and Number Sense	demonstrates understanding of key concepts of sets and the real number system.	is able to formulate challenging situations involving sets and real numbers and solve these in a variety of strategies.	1. describes well-defined sets, subsets, universal sets, and the null set and cardinality of sets.	**M7NS-Ia-1**	NFE Accreditation and Equivalency Learning Material. Sets, Sets and Sets. 2001. pp. 5-18
			2. illustrates the union and intersection of sets and the difference of two sets.	**M7NS-Ia-2**	NFE Accreditation and Equivalency Learning Material. Sets, Sets and Sets. 2001. pp. 20-25
			3. uses Venn Diagrams to represent sets, subsets, and set operations.	**M7NS-Ib-1**	NFE Accreditation and Equivalency Learning Material. Sets, Sets and Sets. 2001. pp. 27-30
			4. solves problems involving sets.	**M7NS-Ib-2**	NFE Accreditation and Equivalency Learning Material. Sets, Sets and Sets. 2001. pp. 18-19, 26, 31-38, 40-41
			5. represents the absolute value of a number on a number line as the distance of a number from 0.	**M7NS-Ic-1**	1. Elementary Algebra I. 2002. pp. 32-33* 2. Moving Ahead With Mathematics II. 1999. p. 46* 3. NFE Accreditation and Equivalency Learning Material. Real Numbers. 2000. pp. 15-17 4. BEAM I – Module 2: Operations on Numbers
			6. performs fundamental operations on integers.	**M7NS-Ic-d-1**	1. Elementary Algebra I. 2002. pp. 34-45* 2. NFE Accreditation and Equivalency Learning Material. Real Numbers. 2000. pp. 12-20 3. OHSP Math 1 – Quarter 1,

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					Module 1.4: Properties of Addition 4. OHSP Math 1 – Quarter 1, Module 1.5: Addition & Subtraction of Integers 5. OHSP Math 1 – Quarter 1, Module 1.6: Multiplication of Integers 6. OHSP Math 1 – Quarter 1, Module 1.7: Division of Integers 7. BEAM I – Module 2: Operations on Numbers 8. DLM 1 – Unit 1: Real Number System, Measurement and Scientific Notation
			7. illustrates the different properties of operations on the set of integers.	**M7NS-Id-2**	1. NFE Accreditation and Equivalency Learning Material. Real Numbers. 2000. pp. 21-25 2. EASE I – Module 4: Up and Down The Line
			8. expresses rational numbers from fraction form to decimal form and vice versa.	**M7NS-Ie-1**	1. Elementary Algebra I. 2002. pp. 45-50* 2. EASE I – Module 5: Part of It 3. DLM 1 – Unit 1: Real Number System, Measurement and Scientific Notation
			9. arranges rational numbers on a number line.	**M7NS-Ie-2**	1. Elementary Algebra I. 2002. pp. 51-53* 2. DLM 1 – Unit 1: Real Number System, Measurement and Scientific Notation
			10. 10. performs operations on rational numbers	**M7NS-If-1**	1. Elementary Algebra I. 2002. pp. 54-61* 2. OHSP Math 1 – Quarter 2,

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					Module 2.3: Polynomials 3. DLM 1 – Unit 1: Real Number System, Measurement and Scientific Notation 4. DLM 1 – Unit 4: Rational Algebraic Expressions 5. DLM 2 – Unit 3: Rational Expressions and Rational Equations
			11. describes principal roots and tells whether they are rational or irrational.	**M7NS-Ig-1**	1. Elementary Algebra I. 2002. pp. 68-69* 2. OHSP Math 1 – Quarter 2, Module 2.3: Polynomials
			12. determines between what two integers the square root of a number is.	**M7NS-Ig-2**	Elementary Algebra I. 2002. pp. 70-71*
			13. estimates the square root of a whole number to the nearest hundredth.	**M7NS-Ig-3**	OHSP Math 1 – Quarter 2, Module 2.3: Polynomials
			14. plots irrational numbers (up to square roots) on a number line.***	**M7NS-Ig-4**	
			15. illustrates the different subsets of real numbers.	**M7NS-Ih-1**	1. Elementary Algebra I. 2002. pp. 24-26* 2. Integrated Mathematics III. 2001. pp. 248-249*
			16. arranges real numbers in increasing or decreasing order.	**M7NS-Ih-2**	1. EASE 1 – Module 3: The Real Thing 2. DLM 1 – Unit 1: Real Number System, Measurement and Scientific Notation
			17. writes numbers in scientific notation and vice versa.	**M7NS-Ii-1**	1. Integrated Mathematics III. 2001. pp. 208-209* 2. OHSP Math 1 – Quarter 1, Module 1.10: Expressing Numbers in Scientific Notation

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					and its Application in Different Disciplines 3. BEAM I – Module 5: Scientific Notation 4. DLM 1 – Unit 2: Measurements and Scientific Notation
			18. represents real-life situations which involve real numbers.	**M7NS-Ii-2**	
			19. solves problems involving real numbers.	**M7NS-Ij-1**	
Grade 7- SECOND QUARTER					
Measurement	demonstrates understanding of the key concepts of measurement.	is able to formulate real-life problems involving measurements and solve these using a variety of strategies.	20. illustrates what it means to measure.	**M7ME-IIa-1**	
			21. describes the development of measurement from the primitive to the present international system of units.	**M7ME-IIa-2**	1. Elementary Algebra I. 2002. pp. 2-4* 2. DLM 1 – Unit 2: Measurements and Scientific Notation
			22. approximates the measures of quantities particularly length , weight/mass, volume, time, angle and temperature and rate.	**M7ME-IIa-3**	1. OHSP Math 1 – Quarter 1, Module 1.9: Measuring Devices and Conversion of Units of Measure 2. BEAM 1 – Module 1: Measurement 3. EASE I – Module 1: Be Precise and Accurate 4. DLM 1 – Unit 2: Measurements and Scientific Notation
			23. converts measurements from one unit to another in both Metric and English systems.***	**M7ME-IIb-1**	1. Elementary Algebra I. 2002. pp. 5-15* 2. NFE Accreditation and Equivalency Learning Material. Measuring Length. 2001. pp. 29-33 3. EASE I – Module 1: Be Precise and Accurate

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					4. DLM 1 – Unit 2: Measurements and Scientific Notation
			24. solves problems involving conversion of units of measurement.***	**M7ME-IIb-2**	1. Elementary Algebra I. 2002. pp. 21-23* 2. NFE Accreditation and Equivalency Learning Material. Measuring Length. 2001. pp. 34-45
Patterns and Algebra	demonstrates understanding of key concepts of algebraic expressions, the properties of real numbers as applied in linear equations, and inequalities in one variable.	is able to model situations using oral, written, graphical, and algebraic methods in solving problems involving algebraic expressions, linear equations, and inequalities in one variable.	25. translates English phrases to mathematical phrases and vice versa.	**M7AL-IIc-1**	1. Elementary Algebra I. 2002. pp. 82-84* 2. NFE Accreditation and Equivalency Learning Material. Equations (Part 1). 2002. pp. 6-10 3. EASE I – Module 6: Express, Translate and Evaluate 4. DLM 1 – Unit 3: Algebraic Expressions
			26. interprets the meaning of a^n where n is a positive integer.	**M7AL-IIc-2**	1. Integrated Mathematics III. 2001. p. 195*
			27. differentiates between constants and variables in a given algebraic expression.	**M7AL-IIc-3**	1. Elementary Algebra I. 2002. p. 79* 2. NFE Accreditation and Equivalency Learning Material. Studying Polynomials. 2001. pp. 4-13 3. OHSP Math 1 – Quarter 2, Module 2.1: Algebraic Expressions 4. BEAM I – Module 1: Contants, Variables and Algebraic Expressions and Simplifying Numerical Expressions 5. EASE I – Module 6: Express, Translate and Evaluate

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			28. evaluates algebraic expressions for given values of the variables.	**M7AL-IIc-4**	1. Elementary Algebra I. 2002. pp. 85-86* 2. NFE Accreditation and Equivalency Learning Material. Studying Polynomials. 2001. pp. 4-11 3. OHSP Math 1 – Quarter 2, Module 2.1: Algebraic Expressions BEAM 1 – Module 3: Evaluating Algebraic Expressions 4. EASE I – Module 6: Express, Translate and Evaluate
			29. classifies algebraic expressions which are polynomials according to degree and number of terms.	**M7AL-IId-1**	1. NFE Accreditation and Equivalency Learning Material. Studying Polynomials. 2001. pp. 4-13 2. EASE I – Module 8: Power of 0
			30. adds and subtracts polynomials.	**M7AL-IId-2**	1. Moving Ahead With Mathematics II. 1999. pp. 166-168* 2. NFE Accreditation and Equivalency Learning Material. Studying Polynomials. 2001. pp. 14-19, 21-23 3. BEAM I – Module 6: Polynomials 4. EASE I – Module 8: Power of 0 5. DLM 1 – Unit 3: Algebraic Expressions

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			31. derives the laws of exponent.	**M7AL-IId-e-1**	1. Integrated Mathematics III. 2001. pp. 195-202* 2. BEAM I – Module 4: Laws of Exponents 3. DLM 1 – Unit 3: Algebraic Expressions
			32. multiplies and divides polynomials.	**M7AL-IIe-2**	1. Moving Ahead With Mathematics II. 1999. pp. 170-182* 2. NFE Accreditation and Equivalency Learning Material. Studying Polynomials. 2001. pp. 25-40 3. EASE I – Module 8: Power of 0 4. DLM 1 – Unit 3: Algebraic Expressions
			33. uses models and algebraic methods to find the: (a) product of two binomials; (b) product of the sum and difference of two terms; (c) square of a binomial; (d) cube of a binomial; (e) product of a binomial and a trinomial.***	**M7AL-IIe-g-1**	1. Moving Ahead With Mathematics II. 1999. pp. 183-188* 2. Elementary Algebra I. 2002. pp. 186-190* 3. NFE Accreditation and Equivalency Learning Material. Special Products and Factoring. 2001. p. 36
			34. solves problems involving algebraic expressions.	**M7AL-IIg-2**	1. NFE Accreditation and Equivalency Learning Material. Studying Polynomials. 2001. pp. 16-17, 19-20, 22-24, 26, 29, 32-33, 36-37, 41-43, 45
			35. differentiates between algebraic expressions and equations.	**M7AL-IIh-1**	
			36. translates English sentences to mathematical sentences and vice versa.	**M7AL-IIh-2**	1. Elementary Algebra I. 2002. pp. 82-84* 2. NFE Accreditation and

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					Equivalency Learning Material. Equations (Part 1). 2001. pp. 6-10
			37. differentiates between equations and inequalities.	**M7AL-IIh-3**	1. Elementary Algebra I. 2002. p. 117* 2. DLM 1 – Unit 5: First Degree Equations and Inequalities in One Variable
			38. illustrates linear equation and inequality in one variable.	**M7AL-IIh-4**	1. NFE Accreditation and Equivalency Learning Material. Equations (Part 1). 2001. pp. 10-12
			39. finds the solution of linear equation or inequality in one variable.	**M7AL-IIi-1**	1. NFE Accreditation and Equivalency Learning Material. Equations (Part 1). 2001. pp. 13-14 2. NFE Accreditation and Equivalency Learning Material. Inequalities. 2001. pp. 11-18 3. EASE I – Module 10: Guess, Try and Check 4. DLM 1 – Unit 5: First Degree Equations and Inequalities in One Variable
			40. solves linear equation or inequality in one variable involving absolute value by: (a) graphing; and (b) algebraic methods.	**M7AL-IIi-j-1**	1. Elementary Algebra I. 2002. pp. 120-125 2. NFE Accreditation and Equivalency Learning Material. Inequalities. 2001. pp. 18-23 3. OHSP Math 1 – Quarter 2, Module 2.6: Solving First Degree Equations and Inequalities in Variables 4. DLM 2 – Unit 1: System of Linear Equations and Rational

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					Equations
			41. solves problems involving equations and inequalities in one variable.	**M7AL-IIj-2**	1. NFE Accreditation and Equivalency Learning Material. Equations (Part 1). 2001. pp. 24-28, 38-39 2. EASE I – Module 10: Guess, Try and Check
Grade 7- THIRD QUARTER					
Geometry	demonstrates understanding of key concepts of geometry of shapes and sizes, and geometric relationships.	is able to create models of plane figures and formulate and solve accurately authentic problems involving sides and angles of a polygon	42. represents point, line and plane using concrete and pictorial models.	**M7GE-IIIa-1**	1. Geometry III. 2013. pp. 3-4* 2. BEAM I – Module 1: Points, Lines, Planes and Angles
			43. illustrates subsets of a line.	**M7GE-IIIa-2**	1. BEAM I – Module 1: Points, Lines, Planes and Angles 2. EASE III – Module 1: Geometry of Shape and Size 3. OHSP Modules – Module 1: Geometry of Shape and Size 4. DLM 3 – Module 1: Geometry of Shapes
			44. classifies the different kinds of angles.	**M7GE-IIIa-3**	1. Moving Ahead With Mathematics II. 1999. pp. 78-84* 2. NFE Accreditation and Equivalency Learning Material. Trigonometric Functions I. 2000. pp. 3-11 3. BEAM I – Module 1: Points, Lines, Planes and Angles 4. EASE III – Module 1: Geometry of Shape and Size 5. OHSP Modules – Module 1: Geometry of Shape and Size 6. DLM 3 – Module 1: Geometry of Shapes

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			45. derives relationships of geometric figures using measurements and by inductive reasoning; supplementary angles, complementary angles, congruent angles, vertical angles, adjacent angles, linear pairs, perpendicular lines, and parallel lines.***	**M7GE-IIIb-1**	1. NFE Accreditation and Equivalency Learning Material. Trigonometric Functions I. 2000. pp. 7-8 2. EASE III – Module 1: Geometric Relations 3. DLM 3 – Module 1: Geometric Relations
			46. derives relationships among angles formed by parallel lines cut by a transversal using measurement and by inductive reasoning.	**M7GE-IIIc-1**	
			47. uses a compass and straightedge to bisect line segments and angles and construct perpendiculars and parallels.	**M7GE-IIId-e-1**	
			48. illustrates polygons: (a) convexity; (b) angles; and (c) sides.	**M7GE-IIIe-2**	1. BEAM I – Module 2: Geometry of Shape and Size: Types of Polygons 2. EASE III – Module 2: Geometry of Shape and Size 3. OHSP Modules – Module 2: Geometry of Shape and Size 4. DLM 3 – Module 2: Geometry of Shape and Size
			49. derives inductively the relationship of exterior and interior angles of a convex polygon.	**M7GE-IIIf-1**	1. BEAM I – Module 3: Angles of Polygons
			50. illustrates a circle and the terms related to it: radius, diameter chord, center, arc, chord, central angle, and inscribed angle.	**M7GE-IIIg-1**	1. Geometry III. 2013. p. 22* 2. BEAM I – Module 18: Circle and their Properties 3. EASE III – Module 1: Circles 4. DLM 3 – Module 1: Circles
			51. constructs triangles, squares, rectangles, regular pentagons, and	**M7GE-IIIh-i-1**	Geometry III. 2013. pp. 11-15*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			regular hexagons.		
			52. solves problems involving sides and angles of a polygon.	**M7GE-IIIj-1**	
Grade 7- FOURTH QUARTER					
Statistics and Probability	demonstrates understanding of key concepts, uses and importance of Statistics, data collection/gathering and the different forms of data representation, measures of central tendency, measures of variability, and probability.	is able to collect and organize data systematically and compute accurately measures of central tendency and variability and apply these appropriately in data analysis and interpretation in different fields.	53. explains the importance of Statistics.	**M7SP-IVa-1**	1. Moving Ahead With Mathematics II. 1999. pp. 215-216* 2. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 264-265* 3. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 232-233* 4. BEAM I – Module 14: Basic Statistics 5. EASE IV – Module 1: Statistics 6. DLM 4 – Module 1: Statistics
			54. poses problems that can be solved using Statistics.	**M7SP-IVa-2**	
			55. formulates simple statistical instruments.	**M7SP-IVa-3**	
			56. gathers statistical data.	**M7SP-IVb-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 266-272* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 233-240*
			57. organizes data in a frequency distribution table.	**M7SP-IVc-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 273-275* 2. Advanced Algebra, Trigonometry and Statistics

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					IV. 2009. pp. 241-243* 3. BEAM I – Module 14: Basic Statistics 4. EASE IV – Module 1: Statistics 5. DLM 4 – Module 1: Statistics
			58. uses appropriate graphs to represent organized data: pie chart, bar graph, line graph, histogram, and ogive.***	**M7SP-IVd-e-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 276-285* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 244-253*
			59. illustrates the measures of central tendency (mean, median, and mode) of a statistical data.	**M7SP-IVf-1**	1. BEAM I – Module 14: Basic Statistics 2. EASE IV – Module 1: Statistics 3. DLM 4 – Module 1: Statistics 4. BALS Video – Mean, Median and Mode
			60. calculates the measures of central tendency of ungrouped and grouped data.	**M7SP-IVf-g-1**	1. Integrated Mathematics III. 2001. pp. 257-269* 2. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 290-301* 3. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 258-269* 4. EASE IV – Module 2: Statistics 5. DLM 4 – Module 2: Statistics
			61. illustrates the measures of variability (range, average deviation, variance, standard deviation) of a statistical data.	**M7SP-IVh-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. p. 302* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. p. 270*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			62. calculates the measures of variability of grouped and ungrouped data.	**M7SP-IVh-i-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 302-307* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 270-275* 3. BEAM I – Module 15: Measures of Variability
			63. uses appropriate statistical measures in analyzing and interpreting statistical data.	**M7SP-IVj-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 308-311* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 276-278*
			64. draws conclusions from graphic and tabular data and measures of central tendency and variability.	**M7SP-IVj-2**	1. BEAM I – Module 15: Measures of Variability

***** Suggestion for ICT enhanced lesson when available and where appropriate**

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
Grade 8- FIRST QUARTER					
Patterns and Algebra	demonstrates understanding of key concepts of factors of polynomials, rational algebraic expressions, linear equations and inequalities in two variables, systems of linear equations and inequalities in two variables and linear functions.	is able to formulate real-life problems involving factors of polynomials, rational algebraic expressions, linear equations and inequalities in two variables, systems of linear equations and inequalities in two variables and linear functions, and solve these problems accurately using a variety of strategies.	1. factors completely different types of polynomials (polynomials with common monomial factor, difference of two squares, sum and difference of two cubes, perfect square trinomials, and general trinomials).	**M8AL-Ia-b-1**	1. Elementary Algebra I. 2000. pp. 200-211* 2. Moving Ahead With Mathematics II. 1999. pp. 194-209 3. NFE Accreditation and Equivalency Learning Material. Special Products and Factoring. 2001. pp. 11-18 4. BEAM I – Module 16: Factoring
			2. solves problems involving factors of polynomials.	**M8AL-Ib-2**	1. Elementary Algebra I. 2000. pp. 212-216*
			3. illustrates rational algebraic expressions.	**M8AL-Ic-1**	1. Elementary Algebra I. 2000. pp. 78-79* 2. EASE II – Module 1: Rational Algebraic Expressions
			4. simplifies rational algebraic expressions.	**M8AL-Ic-2**	1. Elementary Algebra I. 2000. p. 80* 2. NFE Accreditation and Equivalency Learning Material. Understanding Rational Expressions Part 1. 2001. pp. 4-9, 22-24 3. BEAM II – Module 5: Simplifying Rational Algebraic Expressions 4. DLM 2 – Unit 3: Rational Expressions and

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					Rational Equations 5. EASE II – Module 1: Rational Algebraic Expressions
			5. performs operations on rational algebraic expressions.	**M8AL-Ic-d-1**	1. Elementary Algebra I. 2000. p. 81* 2. NFE Accreditation and Equivalency Learning Material. Understanding Rational Expressions Part 1. 2001. pp. 10-13, 16-19, 27-30, 33-37 3. NFE Accreditation and Equivalency Learning Material. Understanding Rational Expressions Part 2. 2001. pp. 17-21, 23-26, 29-32 4. BEAM II – Module 6: Operations on Rational Algebraic Expressions 5. DLM 1 – Unit 4: Rational Algebraic Expressions 6. DLM 2 – Unit 3: Rational Expressions and Rational Equations 7. EASE II – Module 2: Rational Algebraic Expressions 8. EASE II – Module 3: Rational Algebraic Expressions
			6. solves problems involving rational algebraic expressions.	**M8AL-Id-2**	1. Elementary Algebra I. 2000. p. 82* 2. NFE Accreditation and

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					Equivalency Learning Material. Understanding Rational Expressions Part 1. 2001. pp. 8-9, 13-15, 20-25, 31-32, 38-41 3. NFE Accreditation and Equivalency Learning Material. Understanding Rational Expressions Part 2. 2001. pp. 21-22, 27-28, 32-34 4. DLM 1 – Unit 4: Rational Algebraic Expressions 5. EASE II – Module 4: Rational Algebraic Expressions
			7. illustrates the rectangular coordinate system and its uses.***	**M8AL-Ie-1**	1. Moving Ahead With Mathematics II. 1999. pp. 1-4 2. BEAM I – Module 1: Rectangular Coordinate System
			8. illustrates linear equations in two variables.	**M8AL-Ie-3**	1. Elementary Algebra I. 2000. pp. 146-151* 2. Moving Ahead With Mathematics II. 1999. pp. 6-7* 3. DLM 1 – Unit 6: Linear Equations and Inequalities in Two Variables
			9. illustrates the slope of a line.	**M8AL-Ie-4**	1. Elementary Algebra I. 2000. pp. 157-159* 2. Moving Ahead With Mathematics II. 1999.

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					pp. 32-34*
			10. finds the slope of a line given two points, equation, and graph.	**M8AL-Ie-5**	1. Elementary Algebra I. 2000. pp. 159, 162-164, 167-169* 2. Moving Ahead With Mathematics II. 1999. pp. 36-37*
			11. writes the linear equation $ax+by=c$ in the form $y=mx+b$ and vice versa.	**M8AL-If-1**	1. Elementary Algebra I. 2000. pp. 160-162* 2. DLM 1 – Unit 6: Linear Equations and Inequalities in Two Variables
			12. graphs a linear equation given (a) any two points; (b) the x – and y – intercepts; (c) the slope and a point on the line.***	**M8AL-If-2**	1. Elementary Algebra I. 2000. pp. 162-164* 2. DLM 1 – Unit 6: Linear Equations and Inequalities in Two Variables
			13. describes the graph of a linear equation in terms of its intercepts and slope.***	**M8AL-If-3**	1. Elementary Algebra I. 2000. p. 159* 2. BEAM I – Module 2: Graphs of Linear Equations in Two Variables
			14. finds the equation of a line given (a) two points; (b) the slope and a point; (c) the slope and its intercepts.	**M8AL-Ig-1**	1. Elementary Algebra I. 2000. p. 169* 2. Moving Ahead With Mathematics II. 1999. pp. 39-45* 3. DLM 1 – Unit 6: Linear Equations and Inequalities in Two Variables

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			15. solves problems involving linear equations in two variables.	**M8AL-Ig-2**	1. Elementary Algebra I. 2000. pp. 170-172* 2. NFE Accreditation and Equivalency Learning Material. Equations (Part 1). 2001. pp. 29-35 3. DLM 1 – Unit 6: Linear Equations and Inequalities in Two Variables
			16. illustrates a system of linear equations in two variables.	**M8AL-Ih-1**	1. Moving Ahead With Mathematics II. 1999. p. 55* 2. NFE Accreditation and Equivalency Learning Material. Equation (Part 2). 2001. pp. 4-9
			17. graphs a system of linear equations in two variables.***	**M8AL-Ih-2**	1. Moving Ahead With Mathematics II. 1999. p. 58* 2. BEAM II – Module 1: Graphs of the Systems of Linear Equations 3. EASE II – Module 1: Systems of Linear Equations and Inequalities
			18. categorizes when a given system of linear equations in two variables has graphs that are parallel, intersecting, and coinciding.	**M8AL-Ih-3**	1. Moving Ahead With Mathematics II. 1999. pp. 56-58* 2. BEAM II – Module 1: Graphs of the Systems of Linear Equations 3. EASE II – Module 1: Systems of Linear

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					Equations and Inequalities
			19. solves a system of linear equations in two variables by (a) graphing; (b) substitution; (c) elimination.***	**M8AL-Ii-j-1**	1. Moving Ahead With Mathematics II. 1999. pp. 55-63* 2. NFE Accreditation and Equivalency Learning Material. Equation (Part 2). 2001. pp. 4-19 3. BEAM II – Module 2: Solution Set of the Systems of Linear Equations 4. DLM 2 – Unit 1: Systems of Linear Equations and Inequalities 5. EASE II – Module 2: Systems of Linear Equations and Inequalities
			20. solves problems involving systems of linear equations in two variables.	**M8AL-Ij-2**	1. Moving Ahead With Mathematics II. 1999. pp. 65-66* 2. NFE Accreditation and Equivalency Learning Material. Equation (Part 2). 2001. pp. 20-37 3. EASE II – Module 3: Systems of Linear Equations and Inequalities

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
Grade 8- SECOND QUARTER					
Patterns and Algebra	demonstrates key concepts of linear inequalities in two variables, systems of linear inequalities in two variables and linear functions.	is able to formulate and solve accurately real-life problems involving linear inequalities in two variables, systems of linear inequalities in two variables, and linear functions.	21. illustrates linear inequalities in two variables.	**M8AL-IIa-1**	Moving Ahead With Mathematics II. 1999. pp. 66-69*
			22. differentiates linear inequalities in two variables from linear equations in two variables.	**M8AL-IIa-2**	
			23. graphs linear inequalities in two variables.	**M8AL-IIa-3**	1. Moving Ahead With Mathematics II. 1999. p. 70* 2. BEAM II – Module 3: Systems of Linear Inequalities 3. DLM 1 – Unit 6: Linear Equations and Inequalities in Two Variables
			24. solves problems involving linear inequalities in two variables.	**M8AL-IIa-4**	
			25. solves a system of linear inequalities in two variables.***	**M8AL-IIb-1**	Moving Ahead With Mathematics II. 1999. p. 70*
			26. solves problems involving systems of linear inequalities in two variables.	**M8AL-IIb-2**	1. Moving Ahead With Mathematics II. 1999. p. 71* 2. NFE Accreditation and Equivalency Learning Material. Inequalities. 2001. pp. 24-28
			27. illustrates a relation and a function.	**M8AL-IIc-1**	1. Moving Ahead With Mathematics II. 1999. pp. 13-18* 2. Advanced Algebra, Trigonometry and Statistics IV. 2003.

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					pp.5-6* 3. NFE Accreditation and Equivalency Learning Material. Relations and Functions. 2002. pp. 6-13 4. BEAM IV – Module 1: Functions Generally
			28. verifies if a given relation is a function.	**M8AL-IIc-2**	1. Moving Ahead With Mathematics II. 1999. pp. 15-16* 2. Advanced Algebra, Trigonometry and Statistics IV. 2003. p. 6, 9* 3. NFE Accreditation and Equivalency Learning Material. Relations and Functions. 2002. pp. 19-23
			29. determines dependent and independent variables.	**M8AL-IIc-3**	Moving Ahead With Mathematics II. 1999. p. 13*
			30. finds the domain and range of a function.	**M8AL-IId-1**	1. Moving Ahead With Mathematics II. 1999. p. 20* 2. NFE Accreditation and Equivalency Learning Material. Relations and Functions. 2002. pp. 23-32
			31. illustrates a linear function.	**M8AL-IId-2**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 30-31*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 30-31* 3. BEAM I – Module 1: Rectangular Coordinate System 4. DLM 4 – Module 1: Linear Functions 5. EASE IV – Module 1: Linear Functions
			32. graphs a linear function's (a) domain; (b) range; (c) table of values; (d) intercepts; and (e) slope.	**M8AL-IId-e-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 36-38* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 39-41* 3. BEAM IV – Module 2: Linear Functions and their Graphs 4. DLM 4 – Module 1: Linear Functions 5. EASE IV – Module 1: Linear Functions
			33. solves problems involving linear functions.	**M8AL-IIe-2**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. p. 58* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 46-48* 3. BEAM IV – Module 2:

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					Linear Functions and their Graphs
Geometry	demonstrates understanding of key concepts of logic and reasoning.	is able to communicate mathematical thinking with coherence and clarity in formulating and analyzing arguments.	34. determines the relationship between the hypothesis and the conclusion of an if-then statement.	**M8GE-IIf-1**	Geometry III. 2009. p. 59*
			35. transforms a statement into an equivalent if-then statement.	**M8GE-IIf-2**	Geometry III. 2009. p. 61*
			36. determines the inverse, converse, and contrapositive of an if-then statement.	**M8GE-IIg-1**	
			37. illustrates the equivalences of: (a) the statement and its contrapositive; and (b) the converse and inverse of a statement.	**M8GE-IIg-2**	
			38. uses inductive or deductive reasoning in an argument.	**M8GE-IIh-1**	
			39. writes a proof (both direct and indirect).	**M8GE-IIi-j-1**	
Grade 8- THIRD QUARTER					
Geometry	demonstrates understanding of key concepts of axiomatic structure of geometry and triangle congruence.	1. is able to formulate an organized plan to handle a real-life situation.	40. describes a mathematical system.	**M8GE-IIIa-1**	
			41. illustrates the need for an axiomatic structure of a mathematical system in general, and in Geometry in particular: (a) defined terms; (b) undefined terms; (c) postulates; and (d) theorems.	**M8GE-IIIa-c-1**	Geometry III. 2009. pp. 3-4*
		2. is able to communicate mathematical	42. illustrates triangle congruence.***	**M8GE-IIId-1**	1. Moving Ahead With Mathematics II. 1999. pp. 112-114*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
		thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.			2. Geometry III. 2009. pp. 88-91*
			43. illustrates the SAS, ASA and SSS congruence postulates.***	**M8GE-IIId-e-1**	1. Moving Ahead With Mathematics II. 1999. pp. 115-120* 2. Geometry III. 2009. pp. 91-97* 3. BEAM III – Module 10: Triangle Congruence – Triangles: Different and yet the same 4. DLM 3 – Module 1: Triangle Congruence
			44. solves corresponding parts of congruent triangles	**M8GE-IIIf-1**	1. Moving Ahead With Mathematics II. 1999. pp. 114-115*
			45. proves two triangles are congruent.	**M8GE-IIIg-1**	1. Moving Ahead With Mathematics II. 1999. pp. 121-123* 2. Geometry III. pp. 98-100*
			46. proves statements on triangle congruence.	**M8GE-IIIh-1**	
			47. applies triangle congruence to construct perpendicular lines and angle bisectors.	**M8GE-IIIi-j-1**	
Grade 8- FOURTH QUARTER					
Geometry	demonstrates understanding of key concepts of inequalities in a triangle, and parallel and perpendicular lines.	is able to communicate mathematical thinking with coherence and clarity in formulating, investigating, analyzing, and solving real-	48. illustrates theorems on triangle inequalities (Exterior Angle Inequality Theorem, Triangle Inequality Theorem, Hinge Theorem).***	**M8GE-IVa-1**	
			49. applies theorems on triangle inequalities.	**M8GE-IVb-1**	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
		life problems involving triangle inequalities, and parallelism and perpendicularity of lines using appropriate and accurate representations.	50. proves inequalities in a triangle.	**M8GE-IVc-1**	
			51. proves properties of parallel lines cut by a transversal.***	**M8GE-IVd-1**	
			52. determines the conditions under which lines and segments are parallel or perpendicular.	**M8GE-IVe-1**	
Statistics and Probability	demonstrates understanding of key concepts of probability.	is able to formulate and solve practical problems involving probability of simple events.	53. illustrates an experiment, outcome, sample space and event.***	**M8GE-IVf-1**	
			54. counts the number of occurrences of an outcome in an experiment: (a) table; (b) tree diagram; (c) systematic listing; and (d) fundamental counting principle.***	**M8GE-IVf-g-1**	
			55. finds the probability of a simple event.	**M8GE-IVh-1**	
			56. illustrates an experimental probability and a theoretical probability.	**M8GE-IVi-1**	
			57. solves problems involving probabilities of simple events.	**M8GE-IVi-j-1**	

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CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
Grade 9- FIRST QUARTER					
Patterns and Algebra	demonstrates understanding of key concepts of quadratic equations, inequalities and functions, and rational algebraic equations.	is able to investigate thoroughly mathematical relationships in various situations, formulate real-life problems involving quadratic equations, inequalities and functions, and rational algebraic equations and solve them using a variety of strategies.	1. illustrates quadratic equations.	**M9AL-Ia-1**	1. BEAM Second Year Module 4 (TG) 2. EASE Module Second Year Quadratic Equations Module 3 Chapter 2 Quadratic Equations pp.44-46 (LM) 3. NFE Accreditation and Equivalency Learning Material. Equation (Part 2). 2001. pp. 38-41
			2. solves quadratic equations by: (a) extracting square roots; (b) factoring; (c) completing the square; and (d) using the quadratic formula.	**M9AL-Ia-b-1**	1. BEAM Second Year Module 4 (TG) 2. EASE Module Second Year Quadratic Equations, Module 3 Chapter 2 Quadratic Equations pp.47-53(LM) 3. DLM 2 – Unit 2 Lesson 2.2: Special Factoring Techniques 4. DLM 2 – Unit 2 Lesson 2.3: Solving Quadratic Equations by Extracting Square Roots 5. DLM 2 – Unit 2 Lesson 2.4: Solving Quadratic Equations by Factoring 6. DLM 2 – Unit 2 Lesson 2.5: Solving Quadratic Equations by

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					Completing the Squares 7. DLM 2 – Unit 2 Lesson 2.6: Solving Quadratic Functions by the Quadratic Formula 8. DLM 4 – Module 3: Quadratic Functions 9. Advanced Algebra, Trigonometry, and Statistics IV. 2003. pp. 88-90* 10. Integrated Mathematics III. 2001. pp. 100-108* 11. NFE Accreditation and Equivalency Learning Material. Equation (Part 2). 2001. p. 38-42
			3. characterizes the roots of a quadratic equation using the discriminant.	**M9AL-Ic-1**	1. BEAM Second Year, Module 4 (TG) 2. EASE Module Second Year Quadratic Equations, Module 3 Chapter 2 Quadratic Equations pp.53-59 (LM) 3. Advanced Algebra, Trigonometry, and Statistics IV. 2003. pp. 103-104* 4. Integrated Mathematics III. 2001. pp. 116-119*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
			4. describes the relationship between the coefficients and the roots of a quadratic equation.	**M9AL-Ic-2**	1. BEAM Second Year Module 4 (TG) 2. EASE Module Second Year Quadratic Equations, Module 3 Chapter 2 Quadratic Equations pp.53-59 (LM) 3. Integrated Mathematics III. 2001. pp. 120-121*
			5. solves equations transformable to quadratic equations (including rational algebraic equations).	**M9AL-Ic-d-1**	1. BEAM Second Year Module 4 (TG) LM 2. EASE Module Second Year Quadratic Equations, Module 3 Chapter 2 Quadratic Equations pp.53-59 (LM)
			6. solves problems involving quadratic equations and rational algebraic equations.	**M9AL-Ie-1**	1. BEAM Second Year Module 4 (TG) 2. EASE Module Second Year Quadratic Equations, Module 3 Chapter 2 Quadratic Equations pp.61-64 (LM) 3. DLM 2 – Unit 2 Lesson 2.9: Application of Quadratic Equations 4. Integrated Mathematics III. 2001. pp. 109-115* 5. Advanced Algebra, Trigonometry, and Statistics IV. 2003. pp. 95-99*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					6. Advanced Algebra, Trigonometry, and Statistics IV. 2009. pp. 79-83* 7. NFE Accreditation and Equivalency Learning Material. Equations (Part 2). 2001. pp. 42-44
			7. illustrates quadratic inequalities	**M9AL-If-1**	1. Advanced Algebra, Trigonometry, and Statistics IV. 2003. p. 100* 2. Advanced Algebra, Trigonometry, and Statistics IV. 2009. p. 84*
			8. solves quadratic inequalities.	**M9AL-If-2**	APEX Chapter 3 Quadratic Functions Lessons 18-19 pp.203-217 (LM)
			9. solves problems involving quadratic inequalities.	**M9AL-If-g-1**	APEX Chapter 3 Quadratic Functions Lessons 18-19 pp.203-217 (LM)
			10. models real-life situations using quadratic functions.	**M9AL-Ig-2**	1. BEAM Fourth Year, Module 3
			11. represents a quadratic function using: (a) table of values; (b) graph; and (c) equation.	**M9AL-Ig-3**	1. BEAM Fourth Year Module 3 (TG) 2. EASE Module Fourth Year Quadratic Equations, Module 1 (LM)
			12. transforms the quadratic function defined by $y = ax^2 + bx + c$ into the	**M9AL-Ih-1**	1. BEAM Fourth Year Module 3

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			form $y = a(x-h)^2 + k$.		2. Math IV: Advanced Algrebra, Trigonometry and Statistics (Lesson Plans) 2002 BEC (Week 8) pp.31-32 (TG) 3. EASE Module Fourth Year Quadratic Equations, Module 1 4. APEX Chapter 3 Quadratic Functions Lesson 2 pp.101-105 (LM) 5. DLM 4 – Module 1: Quadratic Functions 6. Integrated Mathematics III. 2001. pp. 79-87* 7. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 69-70* 8. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 55-56*
			13. graphs a quadratic function: (a) domain; (b) range; (c) intercepts; (d) axis of symmetry; (e) vertex; (f) direction of the opening of the parabola.	**M9AL-Ig-h-i-1**	1. BEAM Fourth Year, Module 3 (TG) 2. EASE Module Fourth Year Quadratic Equations, Module 1 (LM) 3. Integrated Mathematics III. 2001. p. 78 4. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 70-73*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					5. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 56-59*
			14. analyzes the effects of changing the values of a, h and k in the equation $y = a(x - h)^2 + k$ of a quadratic function on its graph.***	**M9AL-Ii-2**	1. BEAM Fourth Year 2. Math IV: Advanced Algebra, Trigonometry, and Statistics (Lesson Plans) 2002 BEC (Week 8-9) pp.37-41 (TG) 3. EASE Module Fourth Year, Module 2 4. APEX Chapter 3 Quadratic Functions Lesson 2 pp.120-125 (LM) 5. DLM 4 – Module 2: Quadratic Functions 6. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 76-82* 7. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 62-68*
			15. determines the equation of a quadratic function given: (a) a table of values; (b) graph; (c) zeros.	**M9AL-Ij-1**	1. EASE Module Fourth Year Quadratic Functions, Modules 3 and 4 2. APEX Chapter 3 Quadratic Functions Lesson 1 pp.92-100, Lesson 13 pp.165-171(LM) 3. Integrated Mathematics

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					III. 2001. pp. 96-99* 4. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 75-79* 5. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 91-95*
			16. solves problems involving quadratic functions.	**M9AL-Ii-j-2**	1. Math IV: Advanced Algebra, Trigonometry, and Statistics (Lesson Plans) 2002 BEC (Week 8-9) pp.37-41 (TG) 2. EASE Module Fourth Year Quadratic Functions, Modules 3 and 4 3. APEX Chapter 3 Quadratic Functions Lesson 14 pp.172-183 (LM) 4. DLM 4 – Module 4: Quadratic Functions
Grade 9- SECOND QUARTER					
Patterns and Algebra	demonstrates understanding of key concepts of variation and radicals.	is able to formulate and solve accurately problems involving radicals.	17.illustrates situations that involve the following variations: (a) direct; (b) inverse; (c) joint; (d) combined.	**M9AL-IIa-1**	1. BEAM Second Year, Module 8 (TG) 2. EASE Module Second Year Variations Modules 1-3 Chapter 4 Variation pp.102-121 (LM) 3. DLM 2 – Unit 6 Lesson 6.1: Direct Variation 4. DLM 2 – Unit 6 Lesson 6.3: Inverse Variation

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					5. DLM 2 – Unit 6 Lesson 6.4: Joint Variation 6. DLM 2 – Unit 6 Lesson 6.5: Combined Variation 7. Integrated Mathematics III. 2001. pp. 126-128, 131-132, 134-135, 138-140*
			18.translates into variation statement a relationship between two quantities given by: (a) a table of values; (b) a mathematical equation; (c) a graph, and vice versa.	**M9AL-IIa-b-1**	1. BEAM Second Year, Module 8 (TG) 2. EASE Module Second Year Variations, Modules 1-3 Chapter 4 Variation pp.102-121 (LM) 3. Integrated Mathematics III. 2001. pp. 126-128, 131-132, 134-135,138-140*
			19.solves problems involving variation.	**M9AL-IIb-c-1**	1. BEAM Second Year, Module 8 (TG) 2. EASE Module Second Year Variations, Modules 1-3 Chapter 4 Variation pp.102-(LM) 3. Integrated Mathematics III. 2001. pp. 129-130, 132-133, 136-137, 140-145*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
			20.applies the laws involving positive integral exponents to zero and negative integral exponents.	**M9AL-IId-1**	1. BEAM Second Year, Module 9 (TG) 2. Ease Module Second Year Integral Exponents, Modules 2 Chapter 5 Integral Exponents pp.122-135 (LM) 3. Integrated Mathematics III. 2001. pp. 203-207*
			21.illustrates expressions with rational exponents.	**M9AL-IId-2**	1. BEAM Second Year, Module 9 (TG) 2. Ease Module Second Year Integral Exponents, Module 2 Chapter 6 Radical Expressions pp.149 (LM) 3. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 154-157* 4. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 308-311*
			22.simplifies expressions with rational exponents.	**M9AL-IIe-1**	1. BEAM Second Year, Module 9 & 10 (TG) 2. EASE Module Second Year Radical Expressions, Module 2 Chapter 6 Radical Expressions pp.149-150 (LM) 3. DLM 2 – Unit 4 Lesson 4.4: Simplifying Rational

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					Exponents 4. Integrated Mathematics III. 2001. pp. 223-224*
			23.writes expressions with rational exponents as radicals and vice versa.	**M9AL-IIf-1**	1. BEAM Second Year, Module 10 Chapter 6 Radical Expressions pp.150-151 (TG) 2. Integrated Mathematics III. 2001. pp. 224-225*
			24.derives the laws of radicals.	**M9AL-IIf-2**	1. BEAM Second Year, Module 10 (TG) 2. EASE Module Second Year Radical Expressions, Module 3 (LM)
			25.simplifies radical expressions using the laws of radicals.	**M9AL-IIg-1**	1. BEAM Second Year, Module 10 (TG) 2. EASE Module Second Year Radical Expressions, Module 3 Chapter 6 Radical Expressions pp.152-156 (LM) 3. DLM 2 – Unit 5 Lesson 5.2: Simplifying Radicals 4. Integrated Mathematics III. 2001. pp. 226-228*
			26.performs operations on radical expressions.***	**M9AL-IIh-1**	1. BEAM Second Year, Module 11 (TG) 2. EASE Module Second Year Radical Expressions Modules 4-5 Chapter 6 Radical Expressions pp.157-166 (LM)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					3. DLM 2 – Unit 5 Lesson 5.3: Addition/Subtraction of Radical Expressions 4. DLM 2 – Unit 5 Lesson 5.4: Multiplication and Division of Radical Expressions 5. Integrated Mathematics III. 2001. pp. 231-240*
			27. solves equations involving radical expressions.***	**M9AL-IIi-1**	1. BEAM Second Year Module 11 (TG) 2. EASE Module Second Year Radical Expressions Module 6 Chapter 6 Radical Expressions pp.167-170 (LM) 3. Integrated Mathematics III. 2001. pp. 241-244*
			28. solves problems involving radicals.	**M9AL-IIj-1**	1. BEAM Second Year Module 11 (TG) 2. EASE Module Second Year Radical Expressions Module 6 Chapter 6 Radical Expressions pp.171 (LM) 3. Integrated Mathematics III. 2001. pp. 245-248*
Grade 9- THIRD QUARTER					
Geometry	demonstrates understanding of key concepts of parallelograms	is able to investigate, analyze, and solve problems involving	29. identifies quadrilaterals that are parallelograms.	**M9GE-IIIa-1**	1. BEAM Third Year Module 12 (TG) 2. APEX Lesson 1-7 Quadrilaterals Geometry

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
	and triangle similarity.	parallelograms and triangle similarity through appropriate and accurate representation.			Chapter 1 Geometry of Shape and Size, Quadrilaterals p.17 Chapter 4 Quadrilaterals, 4.1.3 The Parallelogram and its properties p.124 (LM)
			30. determines the conditions that make a quadrilateral a parallelogram.	**M9GE-IIIa-2**	1. BEAM Third Year Module 12 (TG), Geometry Chapter 4 Quadrilaterals 4.2. Conditions which guarantee that a quadrilateral is a parallelogram p.132 (LM) 2. DLM 3 – Module 2: Properties of Quadrilateral
			31. uses properties to find measures of angles, sides and other quantities involving parallelograms.	**M9GE-IIIb-1**	EASE Module Third Year Properties of Quadrilaterals Module 1 (LM)
			32. proves theorems on the different kinds of parallelogram (rectangle, rhombus, square).	**M9GE-IIIc-1**	
			33. proves the Midline Theorem.	**M9GE-IIId-1**	
			34. proves theorems on trapezoids and kites.	**M9GE-IIId-2**	
			35. solves problems involving parallelograms, trapezoids and kites.	**M9GE-IIIe-1**	EASE Module Third Year Properties of Quadrilaterals Module 1 (LM)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
			36. describes a proportion.	**M9GE-IIIf-1**	1. BEAM Third Year Module 15 (TG) 2. EASE Module Third Year Similarity Module 1 3. APEX Math Triangles Unit 4 Lesson 1-10, Geometry Chapter 5 Similarity 5.1. Ratio and Proportion p.145 (LM)
			37. applies the fundamental theorems of proportionality to solve problems involving proportions.	**M9GE-IIIf-2**	1. BEAM Third Year Module 15 2. APEX Math Triangles Unit 4 Lesson 1-10, Geometry Chapter 5 Similarity 5.1. Ratio and Proportion p.145 3. DLM 3 – Module 1: Similarity
			38. illustrates similarity of figures.	**M9GE-IIIg-1**	1. BEAM Third Year, Module 16 (TG) 2. EASE Module Third Year Similar Triangles, Module 2 3. APEX Math Triangles Unit 4 Lesson 1-10 Geometry Chapter 5 5.2. Similarity between triangles p.149 (LM)

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			39. proves the conditions for similarity of triangles. *** 39.1 SAS similarity theorem 39.2 SSS similarity theorem 39.3 AA similarity theorem 39.4 right triangle similarity theorem 39.5 special right triangle theorems	**M9GE-IIIg-h-1**	1. BEAM Third Year, Module 16 (TG) 2. EASE Module Third Year Similar Triangles, Module 2 3. APEX Math Triangles Unit 4 Lesson 1-10 Geometry Chapter 5 Similarity, 5.2.4. Basic Similarity Theorems p.157 and 5.4. Similarities in Right Triangles p.166 (LM) 4. DLM 3 – Module 17: Similar Triangles
			40. applies the theorems to show that given triangles are similar.	**M9GE-IIIi-1**	1. BEAM Third Year, Module 16 (TG) 2. EASE Module Third Year Similar Triangles, Module 2 Geometry Chapter 5 Similarity 5.2.4. Basic Similarity Theorems p.157 and 5.4. Similarities in Right Triangles p.166 (LM)
			41. proves the Pythagorean Theorem.	**M9GE-IIIi-2**	1. APEX Math Similarity of Triangles Unit 4 Lesson 11-16 Geometry Chapter 5 Similarity 5.4.2. The Pythagorean Theorem p.169

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
			42. solves problems that involve triangle similarity and right triangles.***	**M9GE-IIIj-1**	1. BEAM Third Year, Module 16 (TG) 2. EASE Module Third Year Similarity, Module 3 3. APEX Math Similarity of Triangles Unit 4 Lesson 11-16 Geometry Chapter 5 Similarity 5.5. Problems Involving Similar Triangles and Other Special Right Triangles p.175 (LM)
Grade 9- FOURTH QUARTER					
Geometry	demonstrates understanding of the basic concepts of trigonometry.	is able to apply the concepts of trigonometric ratios to formulate and solve real-life problems with precision and accuracy.	43. illustrates the six trigonometric ratios: sine, cosine, tangent, secant, cosecant, and cotangent.	**M9GE-IVa-1**	1. BEAM Fourth Year, Module 13 (TG) 2. EASE Module Fourth Year Triangle Trigonometry, Module 1 (LM) 3. DLM 4 – Module 2: Circular Functions and Trigonometry
			44. finds the trigonometric ratios of special angles.	**M9GE -IVb-c-1**	
			45. illustrates angles of elevation and angles of depression.	**M9GE-IVd-1**	1. BEAM Fourth Year, Module 13 (TG) 2. EASE Module Fourth Year Triangle Trigonometry, Module 2 (LM)
			46. uses trigonometric ratios to solve real-life problems involving right triangles. ***	**M9GE-IVe-1**	1. BEAM Fourth Year, Module 13 (TG) 2. EASE Module Fourth Year Triangle

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
					Trigonometry, Module 2 (LM)
			47. illustrates laws of sines and cosines.	**M9GE-IVf-g-1**	1. BEAM Fourth Year, Module 13 (TG) 2. EASE Module Fourth Year Triangle Trigonometry, Module 2 Math IV: Advanced Algebra. Trigonometry, and Statistics (Lesson Plans) 2002 EBEC (Week 6-7) pp.50-56 (LM) 3. DLM 4 – Module 2: Triangle Trigonometry
			48. solves problems involving oblique triangles.	**M9GE-IVh-j-1**	1. BEAM Fourth Year, Module 13 (TG) 2. EASE Module Fourth Year 3. Triangle Trigonometry, Module 2 (LM)

***** Suggestion for ICT enhanced lesson when available and where appropriate**

GRADE 10

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
Grade 10- FIRST QUARTER					
Patterns	demonstrates	is able to formulate and	1. generates patterns.***	**M10AL-Ia-1**	
			2. illustrates an arithmetic sequence	**M10AL-Ib-1**	1. Integrated Mathematics

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
and Algebra	understanding of key concepts of sequences, polynomials and polynomial equations.	solve problems involving sequences, polynomials and polynomial equations in different disciplines through appropriate and accurate representations.			III. 2001. pp. 6-8* 2. NFE Accreditation and Equivalency Learning Material. Arithmetic Sequence. 2000. pp. 3-9 3. DLM 2 – Unit 7: Sequences and Series
			3. determines arithmetic means and nth term of an arithmetic sequence.***	**M10AL-Ib-c-1**	1. Integrated Mathematics III. 2001. pp. 9-12* 2. NFE Accreditation and Equivalency Learning Material. Arithmetic Sequence. 2000. pp. 10-20 3. BEAM II – Module 12: Arithmetic Sequences: Always Come With A Flow 4. DLM 2 – Unit 7: Sequences and Series
			4. finds the sum of the terms of a given arithmetic sequence.***	**M10AL-Ic-2**	1. Integrated Mathematics III. 2001. pp. 14-16* 2. NFE Accreditation and Equivalency Learning Material. Arithmetic Sequence. 2000. pp. 21-32 3. BEAM II – Module 12: Arithmetic Sequences: Always Come With A Flow
			5. illustrates a geometric sequence.	**M10AL-Id-1**	1. Integrated Mathematics III. 2001. pp. 18-19* 2. NFE Accreditation and Equivalency Learning

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
					Material. Geometric Sequence. 2000. pp. 3-6 3. DLM 2 – Unit 7: Sequences and Series
			6. differentiates a geometric sequence from an arithmetic sequence.	**M10AL-Id-2**	NFE Accreditation and Equivalency Learning Material. Geometric Sequence. 2000. p. 6
			7. differentiates a finite geometric sequence from an infinite geometric sequence.	**M10AL-Id-3**	
			8. determines geometric means and nth term of a geometric sequence.***	**M10AL-Ie-1**	1. Integrated Mathematics III. 2001. pp. 19-23* 2. NFE Accreditation and Equivalency Learning Material. Geometric Sequence. 2000. pp. 9-16 3. BEAM II – Module 12: Arithmetic Sequences: Always Come With A Flow 4. DLM 2 – Unit 7: Sequences and Series
			9. finds the sum of the terms of a given finite or infinite geometric sequence.***	**M10AL-Ie-2**	1. Integrated Mathematics III. 2001. pp. 17-26* 2. BEAM II – Module 12: Arithmetic Sequences: Always Come With A Flow 3. DLM 2 – Unit 7: Sequences and Series
			10. illustrates other types of sequences (e.g., harmonic, Fibonacci).	**M10AL-If-1**	Integrated Mathematics III. 2001. pp. 29-33*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			11.solves problems involving sequences.	**M10AL-If-2**	Integrated Mathematics III. 2001. pp. 13, 16-17, 23, 28*
			12.performs division of polynomials using long division and synthetic division.	**M10AL-Ig-1**	1. Elementary Algebra I. 2002. pp. 193-197* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 304-305* 3. NFE Accreditation and Equivalency Learning Material. Studying Polynomials. 2001. pp. 37-42 4. DLM 4 – Module 1: Polynomial Functions 5. EASE IV – Module 1: Polynomial Functions
			13.proves the Remainder Theorem and the Factor Theorem.	**M10AL-Ig-2**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 120-122, 128-129* 2. Advanced Algebra, Trigonometry and Statistics IV. 2013. pp. 94-96, 98-99* 3. DLM 4 – Module 1: Polynomial Functions 4. EASE IV – Module 1: Polynomial Functions
			14.factors polynomials.	**M10AL-Ih-1**	Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 306-307*

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
			15.illustrates polynomial equations.	**M10AL-Ii-1**	
			16.proves Rational Root Theorem.	**M10AL-Ii-2**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 138-141* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 104-106*
			17. solves polynomial equations.	**M10AL-Ij-1**	
			18. solves problems involving polynomials and polynomial equations.	**M10AL-Ij-2**	
Grade 10- SECOND QUARTER					
Patterns and Algebra	demonstrates understanding of key concepts of polynomial function.	is able to conduct systematically a mathematical investigation involving polynomial functions in different fields.	19.illustrates polynomial functions.	**M10AL-IIa-1**	
			20.graphs polynomial functions.	**M10AL-IIa-b-1**	1. Advanced Algebra, Trigonometry and Statistics IV. 2003. pp. 134-138* 2. Advanced Algebra, Trigonometry and Statistics IV. 2009. pp. 109-113* 3. EASE IV – Module 3: Polynomial Functions
			21.solves problems involving polynomial functions.	**M10AL-IIb-2**	
Geometry	demonstrates understanding of key concepts of circles and coordinate geometry.	1. is able to formulate and find solutions to challenging situations involving circles and other related terms in different disciplines	22. derives inductively the relations among chords, arcs, central angles, and inscribed angles.	**M10GE-IIc-1**	1. Geometry III. 2013. pp. 189-197* 2. BEAM III – Module 18: Circles and their Properties
			23.proves theorems related to chords, arcs, central angles, and inscribed	**M10GE-IIc-d-1**	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
		through appropriate and accurate representations. 2. is able to formulate and solve problems involving geometric figures on the rectangular coordinate plane with perseverance and accuracy.	angles.		
			24.illustrates secants, tangents, segments, and sectors of a circle.	**M10GE-IIe-1**	1. Geometry III. 2013. pp. 197-207* 2. DLM 3 – Module 2: Circles 3. EASE III – Module 2: Circles
			25.proves theorems on secants, tangents, and segments.	**M10GE-IIe-f-1**	Geometry III. 2013. pp. 197-207*
			26. solves problems on circles.	**M10GE-IIf-2**	
			27.derives the distance formula.	**M10GE-IIg-1**	Geometry III. 2013. pp. 237-239*
			28.applies the distance formula to prove some geometric properties.	**M10GE-IIg-2**	Geometry III. 2013. pp. 243-248*
			29.illustrates the center-radius form of the equation of a circle.	**M10GE-IIh-1**	Geometry III. 2013. pp. 249-250*
			30.determines the center and radius of a circle given its equation and vice versa.	**M10GE-IIh-2**	1. Geometry III. 2013. pp. 250-252* 2. BEAM III – Module 22: Equation of a Circle
			31. graphs a circle and other geometric figures on the coordinate plane.***	**M10GE-IIi-1**	
			32. solves problems involving geometric figures on the coordinate plane.	**M10GE-IIi-j-1**	Geometry III. 2013. pp. 252-256*
Grade 10- THIRD QUARTER					
Statistics and Probability	demonstrates understanding of key concepts of combinatorics and probability.	is able to use precise counting technique and probability in formulating conclusions and making decisions.	33. illustrates the permutation of objects.	**M10SP-IIIa-1**	
			34. derives the formula for finding the number of permutations of n objects taken r at a time.	**M10SP-IIIa-2**	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			35. solves problems involving permutations.	**M10SP-IIIb-1**	
			36. illustrates the combination of objects.	**M10SP-IIIc-1**	
			37. differentiates permutation from combination of n objects taken r at a time.	**M10SP-IIIc-2**	
			38. derives the formula for finding the number of combinations of n objects taken r at a time	**M10SP-IIId-1**	
			39. solves problems involving permutations and combinations.	**M10SP-IIId-e-1**	
			40. illustrates events, and union and intersection of events.	**M10SP-IIIf-1**	
			41. illustrates the probability of a union of two events.	**M10SP-IIIg-1**	
			42. finds the probability of $(A \cup B)$.	**M10SP-IIIg-h-1**	
			43. illustrates mutually exclusive events.	**M10SP-IIIi-1**	
			44. solves problems involving probability.	**M10SP-IIIi-j-1**	
Grade 10- FOURTH QUARTER					
Statistics and Probability	demonstrates understanding of key concepts of measures of position.	is able to conduct systematically a mini-research applying the different statistical methods.	45. illustrates the following measures of position: quartiles, deciles and percentiles.***	**M10SP-IVa-1**	Integrated Mathematics III. 2001. pp. 270-277*
			46. calculates a specified measure of position (e.g. 90th percentile) of a set of data.	**M10SP-IVb-1**	Integrated Mathematics III. 2001. pp. 277-279*
			47. interprets measures of position.	**M10SP-IVc-1**	
			48. solves problems involving measures of position.	**M10SP-IVd-e-1**	

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner…	The learner…	The learner…		
			49. formulates statistical mini-research.	**M10SP-IVf-g-1**	
			50. uses appropriate measures of position and other statistical methods in analyzing and interpreting research data.	**M10SP-IVh-j-1**	

***** Suggestion for ICT enhanced lesson when available and where appropriate**