Republic of the Philippines
Department of Education
DepEd Complex, Meralco Avenue
Pasig City

Alternative Learning System
K to 12 Basic Education Curriculum

Learning Strand 3
MATHEMATICAL AND PROBLEM SOLVING SKILLS
(BL to JHS)

May 2019

LEARNING STRAND 3: MATHEMATICAL AND PROBLEM SOLVING SKILLS

Learning Strand 3 is intended to help the learners acquire mathematical and problem solving skills that are essential in their meaningful participation in improving the quality of life of the people, community and the country as a whole.

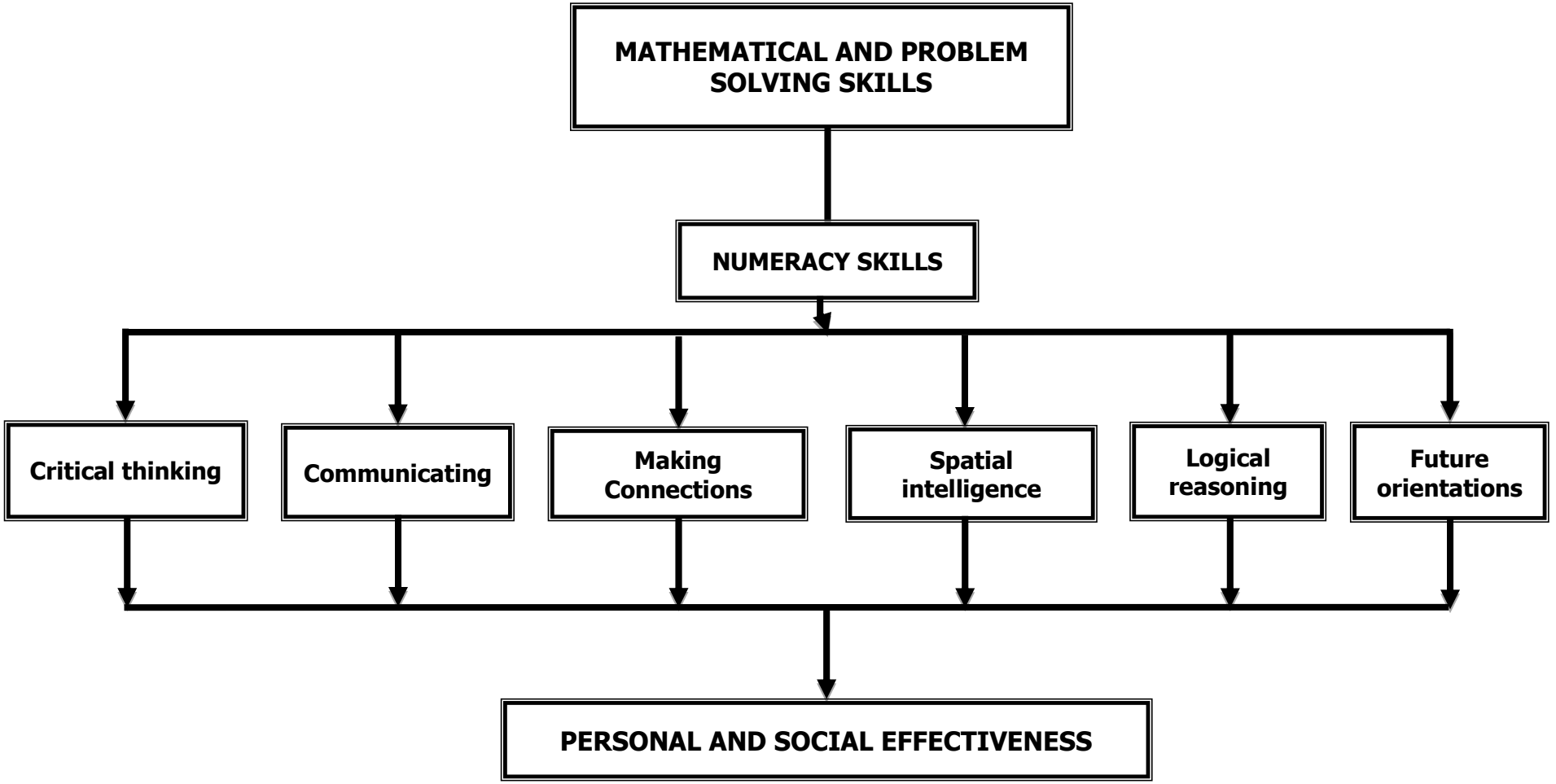
Development of mathematical and problem solving skills among learners will enable them to apply the gained knowledge on mathematical tools in defining problems and implementing effective solutions. These skills are very essential in decision making and are highly valued in every career level.

This learning strand is also intended to develop critical functional competencies on critical thinking, communicating, making connection, spatial intelligence, logical reasoning and future orientation. These competencies specifically seek to extend the learners' abilities in:

- knowing and understanding
- computing and solving
- visualizing and modelling
- representing and communicating
- conjecturing
- reasoning
- proving and decision making
- applying and connecting

Through the development of learners' mathematical and problem solving skills, ALS learners will enhance their own personal and social effectiveness by way of improving the quality of life.

The framework of Learning Strand 3 is schematically presented in the following page.



The numeracy component of Learning Strand 3 focuses on competencies needed for effective mathematical learning and problem solving. Its emphasis is on how these mathematical competencies would be applied to daily life situations. To this end, real-life examples are given for many of the competencies. During curriculum implementation, further emphasis will be necessary on contextualization of the mathematical competencies to align with different learning contexts, needs, and situational realities of different ALS learners.

The competencies are logically sequenced from simple to complex based on the level of cognitive demand and nature of the Mathematics subject area. For example, before being able to do division of fractions, its prerequisite is that one must first understand multiplication of fractions. The ALS Mathematics curriculum contains the following performance standards:

- PERFORMANCE STANDARD A: show desirable attitudes and values in the application of mathematics in daily life.
- PERFORMANCE STANDARD B: communicate ideas using mathematical symbols and expression
- PERFORMANCE STANDARD C: demonstrate knowledge and skills involving geometric shapes and figures and its application in daily lives.
- PERFORMANCE STANDARD D: demonstrate knowledge and skills in using measuring devices in real life situation.
- PERFORMANCE STANDARD E: demonstrate knowledge and skills in pattern and algebra (linear equations and inequalities in one and two variables, linear functions, system in linear equations, and inequalities in two variables; exponents and radical, quadratic equations; inequalities; functions; and polynomials and polynomials equations and functions).
- PERFORMANCE STANDARD F: demonstrate understanding and skills in the effective use of tables, graphs and statistics in presenting, analyzing and interpreting data, and dealing with uncertainty; and making predictions about outcomes for everyday problem solving.

It is envisioned that the attainment of these performance standards will equip ALS learners with the necessary minimum foundational mathematics competencies to prepare them for the world of work and further study under the Senior High School Program.

SENIOR HIGH SCHOOL

To complete SHS and meet the competencies for the middle skills development, entrepreneurship, and employment exits of the basic education curriculum, ALS learners must complete the competencies that are specified in Statistics and Probability. They should also complete the specialization subjects of any of the following Senior High School tracks: Sports, Arts and Design or Technical-Vocational-Livelihood.

College-bound ALS learners in SHS must also complete the core subjects General Mathematics and Statistics and Probability (or their equivalents). They must also complete all the specialization subjects in any of the Academic Strands (Accountancy, Business and Management [ABM], Humanities and Social Sciences [HUMSS], Science, Technology, Engineering and Mathematics [STEM], or General Academic).

If an ALS learner who has completed the K to 12 curriculum wishes to proceed to higher education, this learner may return to the ALS program and take the core curriculum at any time.

Content Standard: Numeracy Skills

Performance Standard A: Show desirable attitudes and values in the application of mathematics in daily life

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
1	Demonstrate the importance and value of mathematics as a means of communicating and solving problems in daily life, e.g., computing and comparing costs of goods to make a decision on which to buy		LS3MP-NS-PSA-BL/LE/AE/JHS-1	√	√	√	√
2	Demonstrate creativity, interest, and curiosity in asking questions, defining problems, considering different strategies, and finding appropriate solutions to problems through mathematics, e.g., analyzing the given data in a problem and identifying what mathematical operation will be applied to solve the problem		LS3MP-NS-PSA-BL/LE/AE/JHS-2	√	√	√	√
3	Express satisfaction in mastery of new ways of thinking through application of mathematics, e.g., deciding the shortest and most accurate way of solving problems in daily life that require mathematical solutions		LS3MP-NS-PSA-BL/LE/AE/JHS-3	√	√	√	√
4	Integrates mathematics with disciplines such as economics, agricultural studies, communication arts, science and technology, geography, cooking, architecture, music, e.g., use of comprehension skills in analyzing problems that would lead to the most accurate way of solving the problem, interpret the number of beats musical notes/rests in a musical composition, etc.		LS3MP-NS-PSA-BL/LE/AE/JHS-4	√	√	√	√
5	State the advantages of accuracy and precision in mathematics, e.g., in measurement		LS3MP-NS-PSA-BL/LE/AE/JHS-5	√	√	√	√
6	Exhibits honesty and accuracy in collecting and reporting mathematical data, e.g., use of untampered measuring instruments such as measuring tapes, weighing scales, volume measurers, and electric and water meters		LS3MP-NS-PSA-BL/LE/AE/JHS-6	√	√	√	√

Content Standard: Numbers and Number Sense

Performance Standard B: Communicate ideas using mathematical symbols and expressions

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
Identify whole numbers							
1	Identify numbers 0–20 (Kindergarten level)	MKC-00-2	LS3MP-NN-PSB-BL/LE-1	√	√		
2	Identify numbers up to 100 with emphasis on numbers 21–100 (Grade 1)	M1NS-Ia-1.1	LS3MP-NN-PSB-LE-2		√		
3	Identify numbers from 0–1000 with emphasis on 101–1000	M2NS-Ia-1.2	LS3MP-NN-PSB-LE-3		√		
4	Identify numbers up to 10,000 with emphasis on 1001–10,000	M3NS-Ia-1.3	LS3MP-NN-PSB-LE-4		√		
5	Identify numbers up to 100,000 with emphasis on numbers 10,001–100,000	M4NS-Ia-1.4	LS3MP-NN-PSB-AE-5			√	
6	Identify numbers up to 10,000,000 with emphasis on 100,001–10,000,000	M5NS-Ia-1.5	LS3MP-NN-PSB-AE-6			√	
Read whole numbers							
7	Read one-digit whole numbers * number of ALS classes per week *number of harvest season per year	M1NS-Ia-1.1	LS3MP-NN-PSB-BL-7	√			
8	Read two- and three-digit whole numbers	M1NS-If-9.1	LS3MP-NN-PSB-BL/LE-8	√	√		
9	Read symbols/numbers of 4- to 6- digit whole numbers *population of province, country, region, world * sweepstakes, and lotto prizes * income/expenditure of individuals, households, municipalities, and provinces	M3NS-Ia-9.3	LS3MP-NN-PSB-LE-9		√		
10	Read numbers/symbols of 7- to 10- digit whole numbers	M4NS-Ia-9.4	LS3MP-NN-PSB-AE-10			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
Represent numbers using variety of materials							
11	Represent numbers from 0–20 (Kindergarten level) *number of children in the family *number of students in the ALS class *number of chicks hatched by a mother hen	MKC-00-4	LS3MP-NN-PSB-BL-11	√			
12	Represent numbers from 0–100 *number of trees in the field/farm *number of days in one month	M1NS-Ia-1.1	LS3MP-NN-PSB-BL/LE-12	√	√		
13	Represent numbers from 101–1000 using variety of materials *number of days per year *number of population in the community		LS3MP-NN-PSB-LE-13		√		
Write whole numbers							
14	Write numbers of one-digit whole numbers	M1NS-If-9.1	LS3MP-NN-PSB-BL-14	√			
15	Write two- and three-digit whole numbers	M1NS-If-9.1	LS3MP-NN-PSB-BL-15	√			
16	Write numbers/symbols of 4- to 6- digit whole numbers	M3NS-Ia-9.3	LS3MP-NN-PSB-LE-16		√		
17	Write numbers/symbols of 7- to 10- digit whole numbers	M4NS-Ia-9.4	LS3MP-NN-PSB-AE-17			√	
Translate numbers/symbols into words or vice versa							
18	Translate symbols/numbers into words of one-digit whole numbers or vice-versa	M1NS-If-9.1	LS3MP-NN-PSB-BL-18	√			
19	Translate two- and three-digit whole numbers into words or symbols, or vice-versa	M1NS-If-9.1	LS3MP-NN-PSB-BL-19	√			
20	Translate numbers/symbols of 4- to 6-digit whole numbers into words and vice versa	M2NS-Ic-9.2 M3NS-Ia-9.3 M4NS-Ia-9.4	LS3MP-NN-PSB-LE-20		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
Count and group objects							
21	Count and group objects: *by piece or by dozen as in eggs, by kind or size as in fish and fruits *by kaing as in fruits *by sacks as in rice, cement *by the number of male and female in a learning group *by votes cast per candidate in a barangay election	M1NS-Id-5	LS3MP-NN-PSB-BL/LE/AE-21	√	√	√	
22	Identify the parts/elements of a group (e.g., fruits and vegetables sold by a stall owner)		LS3MP-NN-PSB-LE/AE/22		√	√	
23	Determine the common parts/components found between two groups (e. g., the similar kinds of plants sold in two different stalls in a garden show)		LS3MP-NN-PSB-LE/AE-23		√	√	
24	Determine the parts/components of two groups (e.g., assorted canned goods in one basket and assorted fruits in another basket)		LS3MP-NN-PSB-LE/AE-24		√	√	
25	Determine the total number of subgroups in a group (e.g., the number of males and females in a barangay assembly meeting)		LS3MP-NN-PSB-LE/AE-25		√	√	
26	Get the difference between two groups (e. g., in poultry raising, by how many more are the hens than the roosters)		LS3MP-NN-PSB-LE/AE-26		√	√	
Money							
27	Read and writes money values (pesos and centavos)	MKAT-00-2 M1NS-Ij-19.1 M2NS-If-20.1	LS3MP-NN-PSB-BL/LE-27	√	√		
28	Compare values of different denominations of Philippine coins and paper bills using the relation symbols:>, < or=	M2NS-If-22.1 M2NS-If-21 M2NS-If-21	LS3MP-NN-PSB-AE-28		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	*Value of coins to paper bills and vice versa *Amount of paper bills equivalent to the total number of coins with similar/different denomination						
29	Count money to pay specific items		LS3MP-NN-PSB-BL/LE/AE-29	√	√	√	
30	Count and records the amount of money earned for the day, e .g., Jeepney /tricycle driver/employees/laborers		LS3MP-NN-PSB-BL/LE-30	√	√		
31	Record daily sales in a sari-sari store		LS3MP-NN-PSB-LE/AE-31		√	√	
32	Prepare an inventory of stocks and supplies in a sari-sari store or mini grocery		LS3MP-NN-PSB-LE/-32		√		
33	Give the relationship between numbers using money values		LS3MP-NN-PSB-LE/AE-33		√	√	
34	Compare whole numbers using >, < and =symbols.	M1NS-Id-6	LS3MP-NN-PSB-LE-34		√		
	Compare prices using greater than/ less than /equal to (>,<, =)						
	Compare the volume of harvested commodities using specific unit of measure						
	Compare numbers up to 100000 using relation symbols						
Ordinal numbers							
35	Read and writes ordinal numbers (1^{st} , 2^{nd} , 3^{rd} up to 10^{th})	M1NS-Ii-17.1	LS3MP-NN-PSB-BL-35	√			
36	Use ordinal numbers to rank sets of objects in everyday life, e.g.: Rank of person according to height/weight		LS3MP-NN-PSB-BL/LE-36	√	√		
37	Read and write Roman numbers Numbers on clocks Dates in Roman numbers		LS3MP-NN-PSB-LE/-37		√		
38	Change Roman numbers to equivalent Hindu-Arabic numbers or vice versa		LS3MP-NN-PSB-AE-38		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
39	Compose and decompose a given number e.g., 5 is 5 and 0; 4 is 1 and 3, and 2 and 2; and 3 and 1, and 4, 0, and5	M1NS-Ic-4	LS3MP-NN-PSB-BL-39	√			
Four Fundamental Operations of Whole numbers							
40	Add and subtract 1- and 2-digit whole numbers without regrouping, e.g.: • total number of vegetables of different kinds harvested from a backyard garden • number of vegetables sold from the total number harvested and unsold		LS3MP-NN-PSB-BL-40	√			
41	Add and subtract 2- to 4-digit whole numbers with regrouping, e.g.: • Total amount of expenses in harvesting specific commodity • Total cost of items bought in the market, sari-sari store or grocery • Change for items bought	M2NS-Ih-27.5 M2NS-IIa-32.5 M3NS-Id-27.6	LS3MP-NN-PSB-LE-41		√		
42	Adds and subtracts 4-to 6-digit whole numbers or more with regrouping, e.g.: • Daily gross sales of a sari-sari store • Daily profit/loss after deducting expenses from the gross sales on sari-sari store		LS3MP-NN-PSB-AE-42			√	
43	Represent and Solve routine and non-routine problems involving subtraction of whole numbers including money with minuends up to 99 with and without regrouping • Daily expenses of the family	M1NS-IIi-34.1	LS3MP-NN-PSB-BL-43	√			

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
44	Create situations involving addition of whole number including money Determine the sources of expenses of a common farmer and its production expenses in one harvest season	M1NS-Iie-30.2 M2NS-Ij-30.2	LS3MP-NN-PSB-BL/LE-44	√	√		
45	Use of correct mathematical symbols (+, -, x, ¸, <, >, =) in solving simple mathematical problems		LS3MP-NN-PSB-BL/LE-45	√	√		
46	Solve one-step problems related to daily life involving addition or subtraction without regrouping, e.g.: Total number of assorted fruits harvested Number of fruits sold from the total harvest and the unsold number of fruits		LS3MP-NN-PSB-BL/LE-46	√	√		
47	Multiply and divide a 1 to 2-digit whole number by a 1 digit number, e.g.: • Total number of eggs on 2 to 9 one-dozen trays • Total fare of 3–9 persons in going to the market • Equal share of each student on chocolate cookies • Equal contribution of each family in community event	M3NS-IIb-40.5	LS3MP-NN-PSB-LE-47		√		
48	Multiply and divide a 2 to 3-digit whole number by a 1- to 2-digit number, e.g.: • Total cost of grocery items purchased • Unit cost of school supplies bought (e.g., pencils, notebook, or ball pens)	M3NS-IIc-43.1 M3NS-IIh-54.1	LS3MP-NN-PSB-LE-48		√		
49	Multiply and divide 0 3-to5-digit whole numbers by a 2- to 3-digit whole number,e.g.: • Total earning of a laborer based on his daily wage • Daily wage of a domestic helper based on her monthly income	M4NS-Ic-43.7 M4NS-If-54.3	LS3MP-NN-PSB-AE-49			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
50	Apply knowledge of multiplication and division to solve daily problems		LS3MP-NN-PSB-LE/AE-50		√	√	
51	Solve problems involving two steps / multiple steps (2-to-4 digit numbers) using two to four fundamental operations, e.g.: • Total number of assorted canned goods donated, and the equal share among the number of families in the barangay • After a laborer computed his total earnings for the week, he sets aside an amount for his daily fare, and divides the remaining amount for the allowance of his three children	M4NS-Ie-45.5	LS3MP-NN-PSB-LE/AE-51		√	√	
52	Demonstrate understanding of the order of operations of the four fundamental mathematical operations (+, -, x,÷¸) to solve problems with 3 or 4 steps applying the principle of MDAS, i.e., multiplication is done first before Division and the addition; the last operation to be done is Subtraction in the case of a 4-step problem, e.g.: • Total cost of goods purchased, profit from the selling price of goods, budgeting monthly expenses based on profits • Total distance travelled, number of liters of gasoline consumed, given an average speed–the number of hours to reach a specific place • Total cost of items sold/bought • Monthly income according to family needs • Daily/weekly/monthly and annual income/salary • Amount of monthly payments for a loan	M4NS-Ii-61.1	LS3MP-NN-PSB-AE-52			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
53	Solve problems involving multiple steps using the four fundamental operations, e.g.: • preparing a family budget • calculating marketing expenses • computing daily/weekly and monthly wages • adding income/expenses and computing profit/loss • preparing a financial statement/balance sheet		LS3MP-NN-PSB-AE-53			√	
54	State, Explain, and Interpret Parenthesis, Multiplication, Division, Addition, Subtraction (PMDAS) or Grouping, Multiplication, Division, Addition, Subtraction (GMDAS) rule	M5NS-Ic-61.2	LS3MP-NN-PSB-AE-54			√	
55	Simplify a series of operations on whole numbers involving more than two operations using the PMDAS or GMDAS rule	M5NS-Id-62.2	LS3MP-NN-PSB-AE-55			√	
56	Demonstrate comprehension of whole numbers and their uses in everyday life		LS3MP-NN-PSB-BL/LE/AE/JHS-56	√	√	√	√
Fractions							
57	Read and write fractions in symbols and in words	M1NS-IIIb-72.1	LS3MP-NN-PSB-BL/LE-57	√	√		
58	Use fractions to name the equal parts of a whole, e.g.: • Fractional part of a cake cut into four equal parts • Shaded part of a rectangular piece of land	M1NS-IIIb-72.1 M1NS-IIIc-73	LS3MP-NN-PSB-BL-58	√			
59	Identify the different kinds of fractions • Dissimilar fractions • Similar fractions		LS3MP-NN-PSB-LE-59		√		
60	Compare fractions using the symbols>, < or=, e.g.:	M2NS-IIIe-77.1 M3NS-IIIa-72.4 M3NS-IIIb-76.3	LS3MP-NN-PSB-LE-60		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
61	Demonstrate knowledge/understanding and skills related to fractions applying these skills in solving real life problems		LS3MP-NN-PSB-AE-61			√	
62	Compute for the Least Common Denominator (LCD), Greatest Common Factor (GCF), and the lowest term of fractions	M4NS-IIC-68.1 M4NS-IIC-69.1	LS3MP-NN-PSB-AE-62			√	
63	Add and subtract similar and dissimilar fractions including combinations with mixed numbers, e.g.: • Given 3 boxes of pizza divided equally into 8 parts, 1 learning group consumed 5 parts of 1 box and another group consumed 11 parts from the 2 boxes, following: • total fractional parts consumed by the 2 learning groups. • From the above example, compute the remaining fractional part that was not consumed by the first learning group	M4NS-IIf-82.1 M4NS-IIf-82.2 M5NS-IE-84	LS3MP-NN-PSB-AE-63			√	
64	Get the reciprocal of fraction	M5NS-Ih-94	LS3MP-NN-PSB-AE-64			√	
65	Multiply and divide fractions including mixed numbers, e.g.: • A family estate is subdivided among three brothers and a surviving mother who is entitled to one-half of the whole estate. The remaining half is to be equally divided among her three sons. Compute the fractional part each son will own	M5NS-Ig-90.1 M5NS-Ii-96.1	LS3MP-NN-PSB-AE-65			√	
66	Solve real-life problems involving fractions and mixed numbers, e.g.: • prices of fruit, vegetables, and meat • sharing something with others, e.g.		LS3MP-NN-PSB-AE-66			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	money, cake, box of chocolate or pizza, piece of land, etc. • measuring ingredients for recipes (1/2 cup, ¾ tbsp.)						
67	Identify factors of a given number up to 100	M4NS-IIa-64	LS3MP-NN-PSB-AE-67			√	
68	Identify the multiples of a given number up to 100	M4NS-IIa-65	LS3MP-NN-PSB-AE-68			√	
69	Differentiate prime from composite numbers	M4NS-IIb-66	LS3MP-NN-PSB-AE-69			√	
70	Write a given number as a product of its prime factors	M4NS-IIb-67	LS3MP-NN-PSB-AE-70			√	
71	Find 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	LS3MP-NN-PSB-AE-71			√	
72	Find 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	LS3MP-NN-PSB-AE-72			√	
73	Solve real-life problems involving GCF and LCM of 2 given numbers	M4NS-IId-70.1	LS3MP-NN-PSB-AE-73			√	
74	Create problems with reasonable answers involving GCF and LCM of 2 given numbers	M4NS-IId-71.1	LS3MP-NN-PSB-AE-74			√	
75	Use divisibility rules for 2,3,4,5,6,7,8,9,10,11, and 12 to find the common factors of numbers	M5NS-Ib-58.1 M5NS-Ib-58.2 M5NS-Ib-58.3	LS3MP-NN-PSB-AE-75			√	
76	Solve 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	LS3MP-NN-PSB-AE-76			√	
77	Create problems (with reasonable answers) involving factors, multiples, and divisibility rules	M5NS-Ic-60	LS3MP-NN-PSB-AE-77			√	
78	Find the common factors and the GCF of 2–4 numbers using continuous division	M5NS-Id-68.2	LS3MP-NN-PSB-AE-78			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
79	Find the common multiples and LCM of 2–4 numbers using continuous division	M5NS-Id-69.2	LS3MP-NN-PSB-AE-79			√	
80	Solve real-life problems involving GCF and LCM of 2–3 given numbers	M5NS-Ie-70.2	LS3MP-NN-PSB-AE-80			√	
81	Create problems (with reasonable answers) involving GCF and LCM of 2–3 given numbers	M5NS-Ie-71.2	LS3MP-NN-PSB-AE-81			√	
Decimals							
82	Read and write decimals in words and symbols, e.g.: • Given 15.378, write the number in words • Given four hundred twenty-one and nine tenths, write the number in symbols	M4NS-IIj-102.1	LS3MP-NN-PSB-AE-82			√	
83	Identify the place value and value of the digits of a decimal, e.g.: • Given twelve grape fruits to sell and an additional half given to the vendor, Identify the decimal number that Represent the grape fruits and the place value of each digit (12.5) • Given three boxes of buko pie, the two boxes are full and the third contains only three-fourths. Identify the decimal number that Represent the buko pie and the place of each digit (2.75)	M4NS-IIi-101.1	LS3MP-NN-PSB-AE-83			√ √	
84	Compare the value of the digits of a decimal e.g.: • Given 13.003, compare the value of the underlined digits • Given 5.66, compare the value of the underlined digits.	M4NS-IIj-104.1	LS3MP-NN-PSB-AE-84			√	
85	Round off decimals, e.g.: • One ream of bond paper contains 500 sheets. If the printer needs 2,300 sheets, how many reams of bond paper	M4NS-IIj-103.1	LS3MP-NN-PSB-AE-85			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	does he need to buy? (He needs 4.6 reams.) • A level learner got a general average of 85.4 in his elementary level work in the formal school. What is his average rounded off to the nearest whole number?						
86	Round decimal numbers to the nearest hundredth and thousandth	M5NS-IIa-103.2	LS3MP-NN-PSB-AE-86			√	
87	Visualize decimal numbers using models like blocks, grids, number lines and money to show the relationship to fractions	M4NS-IIi-99	LS3MP-NN-PSB-AE-87			√	
88	Convert decimals into fractions and vice versa, e.g.: • 0.06 test takers passed the test is the same as 6 out of every 100 test takers o r6/100 • 3/10 of the NFE A & E learners completed the learning sessions is the same as 3 out of every ten learners or 0.3	M4NS-IIi-100	LS3MP-NN-PSB-AE-88			√	
89	Describe and draws a number line	M7NS-Ic-1	LS3MP/NN-PSB-JHS-89				√
90	Add and subtract decimals, e.g.: • Total number of kilos of cabbage harvested • Compute the difference of the distance of two Barangays from the Poblacion	M6NS-Id-106.2	LS3MP-NN-PSB-AE-90			√ √	
91	Solve 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	LS3MP-NN-PSB-AE-91			√	
92	Multiply mentally decimals up to 2 decimals places by 0.1, 0.01, 10, and 100	M6NS-Ie-111.4	LS3MP-NN-PSB-AE-92			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
93	Visualize division of decimal numbers using pictorial models	M5NS-IIf-115	LS3MP-NN-PSB-AE-93			√	
94	Multiply and divide decimals, e.g.: • total length of material needed for fencing • equal distribution of tasks of learners in a group work	M5NS-IId-111.2 M5NS-IIf-116.1	LS3MP-NN-PSB-AE-94			√ √	
95	Divide decimals up to 4 decimal places by 0.1, 0.01, and 0.001	M6NS-Ih-116.5	LS3MP-NN-PSB-AE-95			√	
96	Divide decimals up to 2 decimal places by 10, 100, and 1000 mentally	M6NS-Ih-118	LS3MP-NN-PSB-AE-96			√	
97	Differentiates term in terminating from repeating, non terminating decimal quotients	M6NS-Ii-119	LS3MP-NN-PSB-AE-97			√	
98	Solve problem in daily life involving decimals that are money related, e.g.: • preparing a family budget • calculating marketing expenses • computing daily/weekly and monthly wages • adding income/expenses and computing profit/loss • preparing a financial statement/balance sheet	M6NS-Ii-120.2	LS3MP-NN-PSB-AE-98			√	
99	Demonstrate knowledge understanding and skills related to decimals by applying these skills in solving real life problems		LS3MP-NN-PSB-AE-99			√	
100	Read and write pesos and centavos in words and symbols	M3NS-Ic-20.2	LS3MP-NN-PSB-BL/AE/JHS-100		√	√	√
101	Add and subtract decimals in money form, e.g.: • giving change • borrowing/lending money • computing the cost of post age when sending letters • depositing/withdrawing money		LS3MP-NN-PSB-AE-101		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
102	Multiply and divide decimals involving money, e.g.: • total cost of goods purchased • giving equal amount of money among the children		LS3MP-NN-PSB-AE-102		√		
103	Create 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	LS3MP-NN-PSB-AE-103			√	
Ratio and Proportion							
104	Read and write ratios and proportions in words and symbols, e.g.: • one stick to two bananas (1: 2, or one is to two) • twenty-five learners to one Instructional Manager (twenty-five is to one or 25:1)	M5NS-IIh-122 M5NS-IIh-123	LS3MP-NN-PSB-AE-104			√	
105	Gives examples of real life relationships in the form of ratio and proportion, e.g.: • the ratio of passengers to the seating capacity of a jeepney • the ratio of modules to learners • the ratio of the number of learners to Instructional Managers • the ratio of graduates to the number of persons actually employed in one's community • the ratio of birth rate to death rate per year in one's barangay • the ratio and proportion of males and females in a barangay population		LS3MP-NN-PSB-AE-105			√	
106	Explain the meaning of ratio and proportion and how they are related	M6NS-IIb-131	LS3MP-NN-PSB-AE-106			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
107	Identify equivalent ratios, e.g.: • 1 Instructional Manager: 25 learners is the same as 2:50 • 4 scoops of powdered milk: 2 cups of water is the same as 8: 4	M5NS-IIi-124	LS3MP-NN-PSB-AE-107			√	
108	Express one value as a fraction of another given their ratio and vice versa	M6NS-IIa-129	LS3MP-NN-PSB-AE-108			√	
109	Find how many times one value is as large as another given their ratio and vice versa	M6NS-IIa-130	LS3MP-NN-PSB-AE-109			√	
110	Simplify ratio to its lowest term, e.g.: • The ratio of male to female in a learning group is 5:10 which is 1:2 in lowest term • The ratio of the number of eggs to number of cups of flour for baking is8:12, which is2:3 in lowest term	M5NS-ILI-25	LS3MP-NN-PSB-AE-110			√	
111	Convert ratio to fractions and vice versa, e.g.: • The ratio of buses to jeepneys is 25:75, which is 25/75 in fraction form • The ratio of roosters to mother hens in the backyard poultry is 9/26, which is 9:26 in ratio form		LS3MP-NN-PSB-AE-111			√	
112	Differentiate between ratio and rate, e.g.: • the number of cups of salt to the number of cups of fish (dilis) in making bagoong (ratio) • the number of dresses a dressmaker can sew per day (rate)		LS3MP-NN-PSB-AE-112			√	
113	Solve daily life problems involving ratio and proportion and rate, e.g.: • cost of one piece of fruit based on its cost per dozen • cost of a cavan of rice based on price per kilo		LS3MP-NN-PSB-AE-113			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	• number of words a secretary can type during a given period of time based on the number of words she can type per minute • distance traveled by a car in kilometer/mile per liter of fuel consumed						
114	Create problems involving ratio and proportion, with reasonable answers	M6NS-IIc-135	LS3MP-NN-PSB-AE-114			√	
115	Solve 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	LS3MP-NN-PSB-AE-115			√	
116	Find a missing term in a proportion (direct, inverse, and partitive)	M6NS-IIb-133	LS3MP-NN-PSB-AE-116			√	
117	Demonstrate knowledge of ratio and proportion as applied in solving real-life problems		LS3MP-NN-PSB-AE-117			√	
Percent and Percentage							
118	Explain the meaning of percent and percentage and its practical application in everyday life	M5NS-IIIa-136	LS3MP-NN-PSB-AE-118			√	
119	Convert percent to decimals and vice versa		LS3MP-NN-PSB-AE-119			√	
120	Convert percent to fractions and vice versa		LS3MP-NN-PSB-AE-120			√	
121	Solve daily life problems involving percent and percentages, e.g.: • buying in cash vs. installment • family budget • commission on sales • discount on mark-up prices • taxes, e.g., income tax, VAT • interest rates on loans including the		LS3MP-NN-PSB-AE-121			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	—5-6 scheme, savings account and time deposit • mixing chemicals using the correct proportion, e.g., chemical fertilizers						
122	Create problems involving percent, with reasonable answers	M5NS-IIIb-141	LS3MP-NN-PSB-AE-122			√	
123	Demonstrate knowledge and skills on percent and percentage in solving real-life problems	M5NS-IIIb-140	LS3MP-NN-PSB-AE-123			√	
Sets and integers							
124	Define set and other related terms	M7NS-Ia-1	LS3MP-NN-PSB-JHS-124				√
125	Discuss the different kinds of sets	M7NS-Ia-1	LS3MP-NN-PSB-JHS-125				√
126	Find the subset of a given set		LS3MP-NN-PSB-JHS-126				√
127	Determine the total number of subsets of a given set		LS3MP-NN-PSB-JHS-127				√
128	Determine whether a given set is joint or disjoint		LS3MP-NN-PSB-JHS-128				√
129	Determine whether a given set is equal or equivalent		LS3MP-NN-PSB-JHS-129				√
130	Determine the union of two sets	M7NS-Ia-2	LS3MP-NN-PSB-JHS-130				√
131	Determine the intersection of two sets	M7NS-Ia-2	LS3MP-NN-PSB-JHS-131				√
132	Demonstrate skills in operation on sets		LS3MP-NN-PSB-JHS-132				√
133	Get the difference between the two sets	M7NS-Ia-2	LS3MP-NN-PSB-JHS-133				√
134	Get the complement of a set		LS3MP-NN-PSB-JHS-134				√
135	Solve problems in real life using Venn diagrams	M7NS-Ib-1	LS3MP-NN-PSB-JHS-135				√
136	Define and classify real numbers		LS3MP-NN-PSB-JHS-136				√
137	Describe and draws a number line	M7NS-Ic-1	LS3MP-NN-PSB-JHS-137				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
138	Show the different sets of real numbers on a number line	M7NS-Ic-1	LS3MP-NN-PSB-JHS-138				√
139	Determine the properties of real numbers		LS3MP-NN-PSB-JHS-139				√
140	Find the absolute value of a number	M7NS-Ic-1	LS3MP-NN-PSB-JHS-140				√
141	Perform operations dealing with absolute values		LS3MP-NN-PSB-JHS-141				√
142	Describe the set of integers	M6NS-IIG-151	LS3MP-NN-PSB-JHS-142				√
143	Compare integers with other numbers such as whole numbers, fractions, and decimals	M7NS-Ie-1 M6NS-IIG-152	LS3MP-NN-PSB-JHS-143				√
144	Read and writes positive and negative numbers on number line	M6NS-IIH-153	LS3MP-NN-PSB-JHS-144				√
145	Add integers using the number line	M6NS-Iii-156	LS3MP-NN-PSB-JHS-145				√
146	Add and subtract positive and negative numbers.	M6NS-Iii-156	LS3MP-NN-PSB-AE/JHS-146			√	√
147	Apply knowledge of addition and subtraction of integers in solving daily problems, e.g.: • add positive and negative money values in a profit/loss statement • prepare a balance sheet comparing budgeted line items and actual expenses	M6NS-Iii-156	LS3MP-NN-PSB-AE/JHS-147			√	√
148	Apply knowledge of multiplication and division of integers to solve daily problems, e.g.: • prepare an annual financial statement of sale	M7NS-Ic-d-1 M7NS-Ic-d-1	LS3MP-NN-PSB-JHS-148				√ √ √
149	Solve routine and non-routine problems involving basic operations of integers using appropriate strategies and tools	M6NS-IIJ-157	LS3MP-NN-PSB-AE/JHS-149			√	√

Content Standard: Geometry
Performance Standard C: Demonstrate knowledge and skills involving geometric shapes/figures and its application to daily lives

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
2 Dimensional and 3 Dimensional Objects							
1	Identify plane figures, e.g., triangle, square, rectangle, circle.	M1GE-IIIe-1 M4GE-IIIc-17 M5GE-IIIc-19	LS3MP-G-PSC-BL/LE/AE-1	√	√	√	
2	Compare and classifies 2-dimensional (flat/plane) and 3-dimensional (solid) figures according to common attributes.	M1GE-IIIe-2	LS3MP-G-PSC-BL-2	√			
3	Draws the four basic shapes.	M1GE-IIIf-3	LS3MP-G-PSC-BL-3	√			
4	Describe geometric shapes at home and workplace, e. g., shape of furniture, shape of the roof		LS3MP-G-PSC-BL/LE/AE-4	√	√	√	
5	Relate geometric ideas to number and measurement ideas, including the concepts of perimeter, area, volume, angle measure, capacity, weight, and mass		LS3MP-G-PSC-AE-5			√	
6	Use a variety of tools and technologies to study geometry, e.g., ruler, protractor, compass, software	M1GE-IIIf-4 M2GE-IIIg-6 M4ME-IIIh-49	LS3MP-G-PSC-BL/LE/AE-6	√	√	√	
7	Apply the principles of geometric shapes in daily life situations		LS3MP-G-PSC-BL/LE/AE/JHS-7	√	√	√	√
Lines, symmetry and tessellation							
8	Identifies shapes/figures that show symmetry in a line	M2GE-IIIh-7.1	LS3MP-G-PSC-LE-8		√		
9	Draw the line of symmetry in a given symmetrical figure	M3GE-IIIg-7.4	LS3MP-G-PSC-LE-9		√		
10	Complete a symmetrical figure with respect to a given line of symmetry	M3GE-IIIh-7.5	LS3MP-G-PSC-LE-10		√		
11	Differentiate symmetrical from asymmetrical shapes in furniture, houses, and buildings		LS3MP-G-PSC-LE-11		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
12	Tessellate the plane using triangles, squares, and other shapes • identify real objects that are examples of tessellation such as tiles, roof	M2GE-IIIi-8.2 M3GE-IIIh-8.3	LS3MP-G-PSC-LE-12		√		
13	Recognize and draws a point, line, line segment and ray	M3GE-IIIe-11	LS3MP-G-PSC-LE-13		√		
14	Identify different types of lines such as perpendicular, parallel, and intersecting lines in real objects		LS3MP-G-PSC-LE-14		√		
15	Draw congruent line segments	M3GE-IIIf-13	LS3MP-G-PSC-LE-15		√		
16	Identify congruent line segments	M3GE-IIIf-13	LS3MP-G-PSC-LE-16		√		
17	Represent point, line, and plane using concrete and pictorial models	M7GE-IIIa-1	LS3MP-G-PSC-JHS-17				√
18	Identify objects that represent point, line and plane such as paper, rope, farm land, wall, ceiling, etc.		LS3MP-G-PSC-JHS-18				√
19	Illustrate subsets of a line	M7GE-IIIa-2	LS3MP-G-PSC-JHS-19				√
20	Determine the conditions under which lines and segments are parallel or perpendicular.	M8GE-IVe-1	LS3MP-G-PSC-JHS-20				√
Angles							
21	Illustrate an angle	M4GE-IIIb-14 M7GE-IIIe-2	LS3MP-G-PSC-AE/JHS-21			√	√
22	Draw different types of angles found in the objects used in daily life, e.g., right angles, acute angles, obtuse angles	M4GE-IIIb-14	LS3MP-G-PSC-AE/JHS-22			√	√
23	Measure angles found in geometric shapes using a protractor, e.g.: • sawing of lumber • laying of floor tiles		LS3MP-G-PSC-AE/JHS-23			√	√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	• drawing pie graphs • following a sewing pattern • constructing furniture • welding metals						
24	Convert the given measurement of an angle to unit degrees or radians and vice versa		LS3MP-G-PSC-AE/JHS-24			√	√
25	Classifies the different kinds of angles.	M7GE-IIIa-3	LS3MP-G-PSC-JHS-25				√
Triangles and Quadrilaterals							
26	Classify triangles according to measure of its angles and sides	M4GE-IIIb-16	LS3MP-G-PSC-AE-26			√	
27	Identify and Describe triangles according to sides and angles using concrete objects	M4GE-IIIc-16	LS3MP-G-PSC-AE-27			√	
28	Describe the attributes/properties of triangles and quadrilaterals using concrete objects or models	M4GE-IIIb-15	LS3MP-G-PSC-AE-28			√	
29	Describe the different kinds of quadrilaterals and its properties: square, rectangle, parallelogram, trapezoid, and rhombus	M4GE-IIIc-17	LS3MP-G-PSC-AE-29			√	
30	Identify the different kinds of quadrilaterals: square, rectangle, parallelogram, trapezoid, and rhombus on many objects such as wall, roof, field, etc.	M4GE-IIIc-17	LS3MP-G-PSC-AE-30			√	
31	Relate triangles to quadrilaterals	M4GE-IIId-18.1	LS3MP-G-PSC-AE-31			√	
32	Relate one quadrilateral to another quadrilateral (e.g. square to rhombus)	M4GE-IIId-18.2	LS3MP-G-PSC-AE-32			√	
Polygons							
33	Describe polygons with 5 or more sides	M5GE-IIIc-19	LS3MP-G-PSC-AE-33			√	
34	Name polygons according to number of sides	M5GE-IIIc-19	LS3MP-G-PSC-AE-34			√	
35	Describe and compare properties of polygons (regular and irregular polygons)	M5GE-IIIc-20	LS3MP-G-PSC-AE-35			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
36	Draw polygons with 5 or more sides	M5GE-IIIc-21	LS3MP-G-PSC-AE-36			√	
37	Describe congruent polygons	M5GE-IIId-22	LS3MP-G-PSC-AE-37			√	
38	Illustrate polygons: (a) convexity, (b) angles, and (c) sides	M7GE-IIIe-2	LS3MP-G-PSC-JHS-38				√
39	Construct triangles, squares, rectangles, regular pentagons, and regular hexagons	M7GE-IIIh-i1	LS3MP-G-PSC-JHS-39				√
40	Solve problems involving sides and angles of a polygon.	M7GE-IIIj-1	LS3MP-G-PSC-JHS-40				√
Circles							
41	Visualize and describe a circle	M5GE-IIId-23.1	LS3MP-G-PSC-AE-41			√	
42	Identify the terms related to a circle	M5GE-IIId-23	LS3MP-G-PSC-AE-42			√	
43	Draw circles with different radius using compass	M5GE-IIIe-24	LS3MP-G-PSC-AE-43			√	
44	Illustrate and describe a circle and the terms related to it: Radius, Diameter Chord, Center, Arc, Chord, Central Angle and inscribed Angle	M7GE-IIIg-1	LS3MP-G-PSC-JHS-44				√
45	Illustrate secants, tangents, segments, and sectors of a circle	M10GE-IIe-1	LS3MP-G-PSC-JHS-45				√
46	Solve problems on circles	M10GE-IIf-2	LS3MP-G-PSC-JHS-46				√
47	Determine the center and radius of a circle given its equation and vice versa.	M10GE-IIh-2	LS3MP-G-PSC-JHS-47				√
48	Graph a circle and other geometric figures on the coordinate plane	M10GE-IIi-1	LS3MP-G-PSC-JHS-48				√
49	Solves problems involving geometric figures on the coordinate plane	M10GE-IIi-j-1	LS3MP-G-PSC-JHS-49				√
Solid Figures							

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
50	Describe the different solid figures: cube, prism, pyramid, cylinder, cone, and sphere	M5GE-IIIe-25 M6GE-IIIa-27	LS3MP-G-PSC-AE-50			√	
51	Differentiate plane from surface figures (2D and 3D objects)	M6GE-IIIa-28	LS3MP-G-PSC-AE-51			√	
52	Identify the faces of a solid figure	M6GE-IIIa-28	LS3MP-G-PSC-AE-52			√	
53	Makes models of different solid figures—cube, prism, pyramid, cylinder, cone, and sphere—using plane figures	M5GE-IIIe-26 M6GE-IIIb-29	LS3MP-G-PSC-AE-53			√	
Basic Trigonometry							
54	The Pythagorean Theorem and its application in real life situations Prove the Pythagorean Theorem with cutouts. • In a right triangle, the square of l (a^2) plus the square of b(b^2) is equal to the square of c(c^2). • Upon completion of this lesson, learners will be able to determine the Pythagorean Theorem • Pythagorean Theorem helps build rectangles and squares • Builders use the Pythagorean Theorem to help keep the night angles and build houses, decks, buildings, and to put windows, doors and floors in	M9GE-IIIi-2	LS3MP-G-PSC-JHS-54				√
55	The six trigonometric ratios: • For any right triangle, there are 6 trigonometric ratios (sine, cosine, secant, tangent, cosecant and cotangent • Given a triangle, Identity all 6 trigonometric ratios for all angles (except the right angle)	M9GE-IVa-1	LS3MP-G-PSC-JHS-55				√
56	Find the trigonometric ratios of special angles	M9GE-IVb-c-1	LS3MP-G-PSC-JHS-56				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
57	Illustrate angle of elevation and angle of depression	M9GE-IVd-1	LS3MP-G-PSC-JHS-57				√
58	Use trigonometric ratios to solve real life problems involving right triangles	M9GE-IVe-1	LS3MP-G-PSC-JHS-58				√
59	Illustrate the law of sine and law of cosines • finding the height of a tree/house/mountain • finding the distance of the boat from the shore	M9GE-IVf-g-1	LS3MP-G-PSC-JHS-59				√

Content Standard: Measurement
Performance Standard D: Demonstrate knowledge and skills in using measuring devices in solving real life problems

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
Non-standard units of length, mass and capacity							
1	Show appreciation of indigenous measurement technologies used by different cultures, e.g.: • linear – dipa, dangkal, piye, hakbang • weight – kilo, guhit • volume – ganta, bilao, lata, chupa	M1ME-IVD-20 M1ME-IVE-21 M1ME-IVF-22	LS3MP-M-PSD-BL/LE/AE-1	√	√	√	
Linear measurement							
2	Take and records linear measurements, e.g., width, length, height, distance using rulers, tape measures, meter sticks and indigenous measuring devices		LS3MP-M-PSD-BL/LE-2	√	√		
3	Use appropriate units of length and distances for measurement, e.g., millimeter (mm), centimeter (cm), inch, feet (ft.), yard, meter (m), kilometer (km), and mile (mi)	M2ME-IVb-23 M3ME-IVb-39	LS3MP-M-PSD-LE-3		√		
4	Compare the reliability and accuracy of linear measurements of objects using standard units, e.g., mm,cm, ft., m with indigenous ways, e.g., dangkal, dipa, piye, hakbang		LS3MP-M-PSD-LE-4		√		
5	Convert smaller units of length to bigger units and vice versa, e.g., meter to kilometer, centimeter to meter, centimeter to millimeter, inches to feet, yards to feet	M3ME-IVB-39	LS3MP-M-PSD-LE-5		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
6	Convert one standard unit of length to another and vice versa, e.g.: • inches to centimeters/millimeters e.g., when buying timber, nails or screws) • yards to meters e.g., when buying materials for a dress or curtains	M3ME-IVB-39 M7ME-IIb-1	LS3MP-M-PSD-LE/AE/JHS-6		√ √ √	√ √ √	√ √ √
7	Apply knowledge and skills involving daily life problems involving *linear measurement*, perimeter and circumference of objects.		LS3MP-M-PSD- BL/LE/AE-7	√	√	√	
Mass/Weight							
8	Demonstrate understanding of the meaning of mass/weight		LS3MP-M-PSD- BL/LE-8	√	√		
9	Read and record measures of mass/weight of objects using standard measuring devices and indigenous ways, e.g.: • for determining weight of children, pregnant women • for baking – flour, sugar, milk, salt, oil • for construction – sand, cement		LS3MP-M-PSD- BL/LE-9	√ √ √ √	√ √ √		
10	Estimates mass/weight by lifting and by comparing familiar objects considering the shape, diameter, and height of other containers to determine if the seller gives the right amount of materials for the money paid		LS3MP-M-PSD- BL/LE-10	√	√		
11	Explain the meaning of mass/weight and its practical application		LS3MP-M-PSD- BL/LE-11	√	√		
12	Use appropriate units of measurement of weight, e.g., grams (gm), kilograms (kg), tons (t), pounds (lbs.), ounces (oz.)	M2ME-IVe-31	LS3MP-M-PSD- BL/LE-12	√	√		
13	Convert smaller units of weight/mass to bigger units and vice versa, e.g., grams to kilograms, kilograms to tons	M3ME-IVb-39	LS3MP-M-PSD-LE-13		√		

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
14	Convert standard units of weight/mass from the English to the metric system and vice versa, e.g.: • pounds to kilograms when measuring weight of persons • ounces/pounds to grams/kilograms when buying fish, flour, sugar, rice	M3ME-IVB-39 M7ME-IIb-1	LS3MP-M-PSD-LE/AE/JHS-14		√ √ √	√ √ √	√ √ √
15	Compare weights using standard and indigenous measures; e.g., 1cavan of rice equivalent to 50 kilos is also equal to 20 gantas		LS3MP-M-PSD-BL/LE-15	√	√		
16	Solve everyday problems using knowledge and skills on weight/mass, e.g., • harvest of rice, vegetables, fruits, etc. • market price of farm products (e.g., poultry, pigs, beef) based on weight, e.g., price per kilogram • sugar or rice consumption per person per day, per week or month • feed consumed per day by animals on a farm or in a poultry • cost of purchases of meat, vegetables, fish, and other food items, given the unit cost • savings made by buying food items in bulk • amount of ingredients needed for food preparation for a family gathering or community affair • amount of sand, cement, and gravel needed for construction		LS3MP-M-PSD-BL/LE-16	√ √ √ √ √ √ √ √ √	√ √ √ √ √ √ √ √ √		
Time and Calendar							

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
17	Demonstrate knowledge and skill in understanding time and the calendar		LS3MP-M-PSD-BL/LE/AE-17	√	√	√	
18	Tell and write time by hour, half-hour, and quarter-hour using analog clock	M1ME-IVb-3	LS3MP-M-PSD-BL-18	√			
19	Read and record the time of the day by, e.g.: • using a watch or clock • watching the position of the sun • estimating the length of the shadow cast by objects		LS3MP-M-PSD-BL/LE/AE-19	√ √ √ √	√ √ √ √	√ √ √ √	
20	Convert time from smaller to larger units and vice versa., e.g.: • seconds to minutes/hours/minutes to hours • days to weeks/months/years; weeks to months	M3ME-IVa-8 M3ME-IVa-9	LS3MP-M-PSD-LE-20		√ √ √		
21	Convert time from 12-hour units (a.m. /p.m.) to 24- hour (military) units	M3ME-IVa-8	LS3MP-M-PSD-LE-21		√		
22	Determine the time in another place in the world given the time in the Philippines or vice versa (e.g., when overseas Filipino workers [OFWs] telephone relatives in the Philippines or vice versa)	M5ME-IIIg-15	LS3MP-M-PSD-LE/AE-22		√	√	
23	Use knowledge of time to solve simple problems • estimating the amount of time needed to undertake certain tasks e.g., travel time before attending a program or community activity • counting intervals of time between dosages of medicines • calculating the cost of long-distance phone calls, and cell phone calls (cost per minute)	M4ME-IIIf-12	LS3MP-M-PSD-LE/AE-23		√ √ √ √	√ √ √	
24	Find the elapsed time in minutes and seconds	M4ME-IIIf-11	LS3MP-M-PSD-AE-24			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
25	Estimate the duration of time in minutes	M4ME-IIIf-12	LS3MP-M-PSD-AE-25			√	
26	Solve problems involving elapsed time	M2ME-IVa-6 M4ME-IIIg-13	LS3MP-M-PSD-LE/AE-26		√	√	
27	Read/Interpret time-related charts and tables; e.g.: • provincial bus, ferry, and airline timetables and tickets • tide charts for fishing and boating purposes, time chart for sunset and sunrise, etc.		LS3MP-M-PSD-BL/LE/AE-27	√ √ √	√ √ √	√ √ √	
28	Relate time to distance, e.g.: • estimate the distance for time taken (walking, driving, jogging) • project the number of trips a jeepney/taxi driver needs to earn enough for the boundary fee plus income for the day	M6ME-IIIg-17	LS3MP-M-PSD-AE-28			√ √ √	
29	Relate time to volume of work, e.g.: • estimate how long it Take to finish a task (e.g., plowing a field) for purposes of hiring laborers. • estimate fuel cost per hour and per hectare of use of farm machinery • estimate time needed to irrigate a field of given area		LS3MP-M-PSD-AE-29			√ √ √ √	
30	Relate time to speed, e.g.: • calculating the time and speed of runners/swimmers in a track and field/swimming competition • calculating the time and speed of a fishing boat to reach the next island town • estimating the time of arrival at one's destination when traveling by bus/pump boat	M6ME-IIIg-17	LS3MP-M-PSD-AE-30			√ √ √ √	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
31	Use a calendar to determine days, weeks, months, and years (including number of days in a week, weeks in a month, months in a year, weeks in a year, days in a year, years in a decade/century, etc.)	M1ME-IVa-2	LS3MP-M-PSD-BLP-31	√			
32	Read and compute dates in calendars (birthdays, anniversaries, holidays, historical events, Before Christian Era [BCE]/Christian Era [CE].		LS3MP-M-PSD-BL/LE/AE-32	√	√	√	
33	Use knowledge of the calendar in solving problems, e.g.: • Use the calendar for keeping appointments • Telling the time of the year when typhoons occur, planting and harvest season, and the wet and dry seasons • Ages and age differences of family members in years and in months • Number of days prior to special events for planning purposes—birthdays, anniversaries, Christmas, fiestas, and other special holidays • Fertile period of a wife in family planning/ childbirth spacing • Schedule to monitor the progress of an assignment, task, or job to be done, e.g., planting/ harvesting schedule, implementation plan of a project, travel itinerary, work schedule, program of activities in a wedding ceremony, opening program, etc.		LS3MP-M-PSD-BL/LE/AE/JHS-33	√ √ √ √ √ √ √ √ √	√ √ √ √ √ √ √ √ √ √	√ √ √ √ √ √ √ √ √ √	√
Estimation of quantities, measurement and computations							

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
34	Use estimation skills in working with quantities, measurements, computations, and problems solving in everyday life		LS3MP-M-PSD-BL/LE/AE/JHS-34	√	√	√	√
35	Determine when an estimate is appropriate		LS3MP-M-PSD-BL-35	√			
36	Determine the level of accuracy of an estimate		LS3MP-M-PSD-BL/LE/AE-36	√	√	√	
37	Apply estimation when working with quantities, measurement, and computation, e.g.: • estimate the cost of items to be purchased at the grocery store before paying at the cashier • estimate the number of people who will attend a public meeting to plan for the purchase of snacks/drinks • estimate the weight and number of fish in a fishing boat's daily catch • estimate the number of pieces or volume of items stored in various locally used containers, e.g., candies/soap bars/small fish in a jar/sticks in a bundle		LS3MP-M-PSD-BL/LE/AE/JHS-37	√ √ √ √ √	√ √ √ √ √	√ √ √ √ √	√
38	Use estimation to check the reasonableness of the results of computations		LS3MP-M-PSD-BL/LE/AE-38	√	√	√	
Perimeter and Circumference							
39	Explain the meaning of perimeter and its practical applications in daily life		LS3MP-M-PSD-AE-39			√	
40	Measure the perimeter of any given figure using appropriate tools.	M4ME-IIIh-49	LS3MP-M-PSD-AE-40			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
41	Computes the perimeter of different geometric shapes in everyday life, e.g.: • perimeter of a regular polygons like window frame, door, rectangular garden to estimate the fencing materials needed • perimeter of a regular or an irregular polygon-shaped lot for estimating the length of fencing materials needed, e.g., rice field, vegetable garden, fishpond	M4ME-IIIi-51	LS3MP-M-PSD-AE-41			√ √ √	
42	Apply the formula for computing perimeter and circumference	M5ME-IIIh-68	LS3MP-M-PSD-AE-42			√	
43	Solve routine and non-routine problems in real-life situations involving perimeter of squares and rectangles, triangles, parallelograms, and trapezoid	M4ME-IIIi-52	LS3MP-M-PSD-AE-43			√	
44	Explain the meaning of circumference and related terms like radius, diameter and its practical applications in daily life situations, e.g.: • length of metal edging needed for a circular table • distance jogged by an athlete in an oval		LS3MP-M-PSD-AE-44			√	
45	Measure circumference of a circle using appropriate tools	M5ME-IIIh-68	LS3MP-M-PSD-AE-45			√	
46	Compute the diameter, radius and circumference of a circle using the value of pi (p)		LS3MP-M-PSD-AE-46			√	
47	Solve routine and non-routine problems involving circumference of a circle	M5ME-IIIj-71	LS3MP-M-PSD-AE-47			√	
Area							
48	Differentiate perimeter from area	M4ME-IIIi-52	LS3MP-M-PSD-AE-48			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
49	Explain the meaning of area and its practical application in real life situations, e.g.: • the number of square units of cloth to cover a dining table • the number of square tiles needed to cover the floor area of a living room • given the length and the width of a rice field, find its total area		LS3MP-M-PSD-LE/AE-49		√ √ √ √	√ √ √ √	
50	Identify units of measurement, e.g., square meters, square kilometers, hectares		LS3MP-M-PSD-LE/AE-50		√	√	
51	Identify different plane figures and irregular solids		LS3MP-M-PSD-LE/AE-51		√	√	
52	Use the appropriate units of measure in measuring area.	M3ME-IVd-43	LS3MP-M-PSD-LE/AE-52		√	√	
53	Convert smaller units of area to bigger units and vice versa, e.g.: • square meters to hectares (measuring a piece of land) • square meters to square foot (determining the number of tiles needed based on computed floor area)	M4ME-IIIj-54	LS3MP-M-PSD-AE-53			√ √ √	
54	Convert one standard unit of area in the English to the metric system and vice versa, e.g., square feet to square meters, square meters to acres, square inches to square centimeters	M4ME-IIIj-54 M7ME-IIb-1	LS3MP-M-PSD-LE/AE/JHS-54		√ √ √	√ √ √	√ √ √
55	Derive the formula for area		LS3MP/M-PSD-LE/AE-55		√	√	
56	Derive the formula for the area of a rectangle and a square.	M3ME-IVe-44	LS3MP-M-PSD-LE-56		√		
57	Derive the formula for the area of triangles, parallelograms, and trapezoids	M4ME-IVb-57	LS3MP-M-PSD-AE-57			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
58	Determine the area of a square and a rectangle with the use of square objects representing standard square units and compute the same applying the appropriate formulae for the same plane figures, e.g.: • finding the number of square objects representing square inch to cover a book • finding the number of square objects representing square decimeters to cover a rectangular table • computing for the area of the bathroom in square decimeters to determine the number of tiles to be used of the same square unit • computing for the area of a square table to determine the number of square place mats to cover it	M2ME-IVg-36 M4ME-IVb-58	LS3MP-M-PSD-LE/AE-58		√	√	
59	Estimate the area of irregular plane figures made up of squares and rectangles	M4ME-IVa-56	LS3MP-M-PSD-AE-59			√	
60	Solve routine and no routine problems involving area of composite figures formed by any two or more of the following: triangle, square, rectangle, circle, and semicircle	M6ME-IIIh-90	LS3MP-M-PSD-AE-60			√	
61	Find the area of irregular plane figures made up of squares and rectangles using sq. cm., sq. and sq.	M4ME-IIIj-55	LS3MP-M-PSD-AE-61			√	
62	Use appropriate formula in solving daily life problems involving the area of plane figures: square, rectangle, triangle, parallelogram, e.g.: • given the area of a particular room, and floor tiles of certain dimensions, compute for the number of tiles		LS3MP-M-PSD-LE/AE-62		√ √	√ √	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	needed to tile the floor • given a farmland of a particular size and a recommended number of seedlings per hectare, estimate the number of seedlings needed to fully plant the area • given the dimensions of a family estate that has an irregular shape, compute for its area as basis for the computation of real estate taxes • given a certain floor area in a chicken hatchery/poultry farm and the minimum space needed per chicken, compute for the cage area requirements and the optimum layout of cages on site				√ √ √	√ √ √	
63	Create problems (with reasonable answers) involving area involving squares, rectangles, triangles, parallelograms, and trapezoids	M4ME-IVb-61	LS3MP-M-PSD-AE-63			√	
64	Create problems (with reasonable answers) involving area involving squares, rectangles, triangles, parallelograms, and trapezoids	M4ME-IVb-61	LS3MP-M-PSD-AE-64			√	
65	Derive a formula in finding the area of a circle	M5ME-IVa-73	LS3MP-M-PSD-AE-65			√	
66	Find the area of a given circle	M5ME-IVa-74	LS3MP-M-PSD-AE-66			√	
67	Create problems involving a circle	M5ME-IVb-76	LS3MP-M-PSD-AE-67			√	
68	Apply knowledge and skills in solving daily life problems on area.		LS3MP-M-PSD-LE/AE-68		√	√	
Surface Area							
69	Explain the meaning of surface area and its practical application, e.g., estimating the		LS3MP-M-PSD-AE-69			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	amount of wrapping paper for a gift in a square or rectangular box.						
70	Describe surface area and names the unit of measure used for measuring the surface area of solid/space figures	M6ME-IIIi-91	LS3MP-M-PSD-AE-70			√	
71	Find the surface area of cubes, prisms, pyramids, cylinders, cones, and spheres	M6ME-IIIi-93	LS3MP-M-PSD-AE-71			√	
72	Use appropriate formula involving problems on surface area, e.g.: • compute for the amount of paint needed to coat the surface area of a cylindrical water tank • compute for the surface area of a cube to estimate the number of sheets of Manila paper to wrap it	M6ME-IIIj-94	LS3MP-M-PSD-AE-72			√	
73	Create problems involving surface area and volume of solid/space figures, with reasonable answers	M6ME-IVc-99	LS3MP-M-PSD-AE-73			√	
74	Apply knowledge and skills in solving daily life problems on surface area.		LS3MP-M-PSD-AE-74			√	
Volume							
75	Compare the concept of area with that of volume in terms of figures, dimensions, unit of measurements, total outside surface or bulk/fullness, formulae for computation, etc.		LS3MP-M-PSD-AE-75			√	
76	Identify practical applications of volume e.g., cubic centimeters (cc), milliliters (ml), cubic meters, cubic inches, cubic feet, liters, gallons, pints and fluid oz., e.g.: • liquid medicine and vitamins for children per prescribed dose, bottles for preparing infant milk formula, measuring the ingredients of a recipe, etc.		LS3MP-M-PSD-AE-76			√ √	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	• amount of water needed to fill a cylindrical tank						
77	Measure, reads and records measures of volume using standard equipment and indigenous measures; e. g., one liter of coke and one gate of corn/rice		LS3MP-M-PSD-AE-77			√	
78	Convert smaller units of volume to bigger units and vice versa, e.g., milliliters(ml) to liters (L) or L to ml, e.g.: • teaspoon or tablespoon to milliliters (giving medication to sick people or using it in cooking) • find out how many bottles of 500 ml soft drinks are equivalent to 1-liter bottle • find out how many 8-oz bottles are equivalent to a gallon of kerosene	M5ME-IVd-80	LS3MP-M-PSD-AE-78			√ √ √	
79	Convert one standard unit of volume from the English to the metric system and vice versa, e.g.: • ml to oz. (baby's milk formula) • quarts to liters (cooking oil, plastic roof cement) • gallons to liters (buying paints). • pints to liters (buying milk or other fluids)	M7ME-IIb-1	LS3MP-M-PSD-JHS-79				√ √ √ √ √
80	Approximate measurement of volume in everyday use, e.g.: • number of cups of flour needed in baking • number of liters of milk/water consumed • number of liters/gallons of gasoline needed to refill the tank of a motorcycle/healable/tricycle/car		LS3MP-M-PSD-AE-80			√ √ √ √	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
81	Derive the formula for the volume		LS3MP-M-PSD-AE-81			√	
82	Derive the formula for the volume of rectangular prisms	M4ME-IVe-63	LS3MP-M-PSD-AE-82			√	
83	Derive the formula in finding the volume of a cube and a rectangular prism using cubic cm and cubic m	M5ME-IVc-79	LS3MP-M-PSD-AE-83			√	
84	Derive the formula for finding the volume of cylinders, pyramids, cones, and spheres	M6ME-IVa-96	LS3MP-M-PSD-AE-84			√	
85	Use appropriate formula to find the volume of various solids, e.g., cylinders, cubes, rectangular prisms, spheres, etc. in solving everyday problems, like: • mixture of water and insecticide for proper use on a given area • the number of liters of water needed for daily consumption • consumption of gasoline/kerosene/diesel per day with the idea of reducing cost or making some savings • volume of stones in making dams/breakwaters • floor area and ceiling height to determine storage capacity for various items, e.g., harvested crops, store furniture, packing cases • output of quarrying in cubic meters based on land area		LS3MP-M-PSD-AE-85			√	
86	Use indigenous measures to estimate the volume of objects, e.g. • number of cups equivalent to the content of one gate • pails of water and their equivalent in gallons/liters used in household chores		LS3MP-M-PSD-AE-86			√ √ √	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
87	Create problems (with reasonable answers) involving volume of rectangular prism	M4ME-IVf-66	LS3MP-M-PSD-AE-87			√	
88	Compute for the volume of spatial figures	M4ME-IVe-64 M6ME-IVb-97	LS3MP-M-PSD-AE-88			√	
Temperature and pressure							
89	Interpret temperature in daily life activities, e.g., boiling water, ice water, weather, by using appropriate measuring devices such as a thermometer		LS3MP-M-PSD-AE/JHS-89			√	√
90	Apply knowledge of temperature in solving everyday problems, e.g.: • monitoring the fever of a family member • planting crops appropriate for climate conditions • food preparation e.g., baking (cakes and bread) or canning of nata de coco		LS3MP-M-PSD-AE-90			√ √ √ √	
91	Monitor and control the temperature of everyday technologies such as: • room air conditioner and refrigerator • oven (baking)		LS3MP-M-PSD-AE-91			√	
92	Read, record, and Interpret body temperature using a thermometer	M5ME-IVf-85	LS3MP-M-PSD-AE-92			√	
93	Convert standard unit of temperature from Fahrenheit to Celsius and vice versa		LS3MP-M-PSD-AE-93			√	
94	Read, record, describe and interpret the air pressure of common objects used in everyday activities e.g. tricycle/car tire or compressor using an appropriate measuring device		LS3MP-M-PSD-AE-94			√	
95	Demonstrate knowledge on how to use pressure valves of technologies using gas, such as: • LPG tank		LS3MP-M-PSD-AE-95			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	• hospital oxygen tank • machine shop (oxygen-acetylene gas) • kerosene powered refrigerators						
96	Demonstrate an understanding of the concepts of temperature and pressure		LS3MP-M-PSD-AE-96			√	√
Water and Electricity Consumption							
97	Read, record, and Interpret measures of consumption of water and electricity	M6ME-IVd-100	LS3MP-M-PSD-AE-97			√	
98	Relate water consumption with activities/practices that save water		LS3MP-M-PSD-AE-98			√	
99	Recognize the units of measure in reading and estimating water and electricity consumption (cubic meter and kilowatt-hour)		LS3MP-M-PSD-AE-99			√	
100	Relate electricity consumption with length of time, frequency of use of electric appliances, and wattage of the appliances		LS3MP-M-PSD-AE-100			√	
101	Interpret the items on water and electricity billing statements		LS3MP-M-PSD-AE-101			√	
102	Compute for the cost of consumption of electricity and water	M6ME-IVd-101	LS3MP-M-PSD-AE-102			√	
103	Compute for the amount of water wasted and its cost if a leaking faucet goes unrepaired		LS3MP-M-PSD-AE-103			√	
104	Read and Interpret electric and water and electricity consumption (optional for learners with no access to electric/water meter)		LS3MP-M-PSD-AE-104			√	
105	Demonstrate skills in measuring water and electricity consumption		LS3MP-M-PSD-AE-105			√	

Content Standard: Patterns and Algebra

Performance Standard E: Demonstrate knowledge and skills in patterns and algebra (linear equations and inequalities in one and two variables, linear functions, systems of linear equations, and inequalities in two variables; exponents and radicals, quadratic equations; inequalities; functions; and polynomials and polynomial equations and functions)

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
1	Find the prime factors of an integer	M4MS-IID-67	LS3MP-PA-PSE-AE-1			√	
2	Find the greatest common factor (GCF) of a set of monomials	M4MS-11C-68.1	LS3MP-PA-PSE-AE-2			√	
3	Define exponents and other related terms	M6MS-IIf-146	LS3MP-PA-PSE-AE-3			√	
4	Describe the exponent and the base in a number expressed in exponential notation	M6NS-IIf-146	LS3MP-PA-PSE-AE-4			√	
5	Give the value of numbers expressed in exponential notation	M6NS-IIf-147	LS3MP-PA-PSE-AE-5			√	
6	Interpret and Explain the Grouping, Exponent, Multiplication, Division, Addition, Subtraction (GEMDAS) rule	M6NS-IIf-148	LS3MP-PA-PSE-AE-6			√	
7	State and apply the laws of exponents	M7AL-IId-e-1	LS3MP-PA-PSE-JHS-7				√
8	Identify the laws of exponents in real-life situations • the growth of bacteria in a community is in exponential form		LS3MP-PA-PSE-JHS-8				√ √
9	Solve problems involving zero and negative integral exponents	M9ML-IId-1	LS3MP-PA-PSE-JHS-9				√
10	Formulate the rule in finding the nth term using different strategies (looking for a pattern, guessing and checking, working backward) e.g., 4,7,13, 16, n (the nth term is 3n+1)	M6AL-IIId-7	LS3MP-PA-PSE-AE-1			√	
11	Define algebraic expressions and other related terms	M6AL-IIIE-17	LS3MP-PA-PSE-AE-11			√	

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
12	Differentiate expression from equation.	M6AL-IIId-15 M7AL-IIh-1	LS3MP-PA-PSE-AE-12			√	√
13	Translate real-life verbal expressions into letters or symbols and vice versa	M6AL-IIIe-16	LS3MP-PA-PSE-AE-13			√	
14	Define a variable in an algebraic expression and equation	M6AL-IIIe-17	LS3MP-PA-PSE-AE-14			√	
15	Represent quantities in real-life situations using algebraic expressions and equations	M6AL-IIIe-18	LS3MP-PA-PSE-AE-15			√	
16	Solve routine and no routine problems involving different types of numerical expressions and equations such as 7+9 =+ 6	M6AL-IIIf-19	LS3MP-PA-PSE-AE-16			√	
17	Create routine and no routine problems involving numerical expressions and equations	M6AL-IIIf-20	LS3MP-PA-PSE-AE-17			√	
18	Define polynomials		LS3MP-PA-PSE-JHS-18				√
19	Interpret the meaning of anywhere n is a positive integer	M7AL-IIc-2	LS3MP-PA-PSE-JHS-19				√
20	Differentiate between constants and variables in a given algebraic expression	M7AL-IIc-3	LS3MP-PA-PSE-JHS-20				√
21	Evaluate algebraic expressions for given values of the variables	M7AL-IIc-4	LS3MP-PA-PSE-JHS-21				√
22	Classify algebraic expressions which are polynomials according to degree and number of terms	M7AL-IId-1	LS3MP-PA-PSE-JHS-22				√
23	Add and subtract polynomials	M7AL-IId-2	LS3MP-PA-PSE-JHS-23				√
24	Multiply and divides polynomials	M7AL-IIe-2	LS3MP-PA-PSE-JHS-24				√
25	Perform operations on polynomials	M7AL-IId-2 M7AL-IIe-2	LS3MP-PA-PSE-JHS-25				√
26	Factor polynomials using the various methods of factoring (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	LS3MP-PA-PSE-JHS-26				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
27	Illustrate rational algebraic expression	M8AL-Ic-1	LS3MP-PA-PSE-JHS-27				√
28	Simplify rational algebraic expressions	M8AL-Ic-2	LS3MP-PA-PSE-JHS-28				√
29	Simplify complex rational algebraic expressions		LS3MP-PA-PSE-JHS-29				√
30	Multiply rational algebraic expressions	M8AL-Ic-d-1	LS3MP-PA-PSE-JHS-30				√
31	Divide the rational algebraic expressions	M8AL-Ic-d-1	LS3MP-PA-PSE-JHS-31				√
32	Find the LCD of rational algebraic expressions (both with the same and different denominators)		LS3MP-PA-PSE-JHS-32				√
33	Convert a given rational expression into an equivalent rational expression		LS3MP-PA-PSE-JHS-33				√
34	Perform addition of rational algebraic expressions (both with the same and different denominators)	M8AL-Ic-d-1	LS3MP-PA-PSE-JHS-34				√
35	Perform subtraction of rational algebraic expressions (both with the same and different denominators)	M8AL-Ic-d-1	LS3MP-PA-PSE-JHS-35				√
36	Represent real-life situations using rational algebraic expressions *amount of work done per unit *distance travel per unit *speed per unit		LS3MP-PA-PSE-JHS-36				√ √ √ √
37	Perform operations on rational algebraic expressions that involve 2 or more operations		LS3MP-PA-PSE-JHS-37				√
38	Illustrate the rectangular coordinate system and its Use	M8AL-IE-1	LS3MP-PA-PSE-JHS-38				√
39	Define linear equations		LS3MP-PA-PSE-JHS-39				√
40	Simplify linear equations		LS3MP-PA-PSE-JHS-40				√
41	Write the linear equation ax + by = c in the form y = mx + b and vice-versa; x+y=3 transform into y=-x+3	M8AL-If-1	LS3MP-PA-PSE-JHS-41				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
42	Find the slope of linear equations	M8AL-IE-5	LS3MP-PA-PSE-JHS-42				√
43	Find the intercepts of linear equations both x and y- intercepts		LS3MP-PA-PSE-JHS-43				√
44	Graph different types of linear equations	M8AL-If-2	LS3MP-PA-PSE-JHS-44				√
45	Describe the slope and intercepts of linear equation based on the graph	M8AL-If-3	LS3MP-PA-PSE-JHS-45				√
46	Solve systems of linear equations using different methods: elimination & substitution	M8AL-Ii-j-1	LS3MP-PA-PSE-JHS-46				√
47	Determine whether the systems of linear equations in two variables are consistent or inconsistent, dependent or independent		LS3MP-PA-PSE-JHS-47				√
48	Describe systems of linear equations as to whether its graph is parallel, coinciding, or intersecting using formula	M8AL-Ih-3	LS3MP-PA-PSE-JHS-48				√
49	Solve word problems involving linear equations	M7AL-IIj-2 M8AL-Ig-2	LS3MP-PA-PSE-JHS-49				√
50	Define inequality and other related terms		LS3MP-PA-PSE-JHS-50				√
51	Sketch inequalities (linear and quadratic inequalities)		LS3MP-PA-PSE-JHS-51				√
52	Solve systems of inequalities (both 1st- and 2nd-degree equations)	M8AL-IIb-1	LS3MP-PA-PSE-JHS-52				√
53	Solve the inequalities by graphing	M10AL-Iia-b-1	LS3MP-PA-PSE-JHS-53				√
54	Solve word problems involving inequalities • determine the value of production that will give profit/loss • determine the number of supply and demand that will give profit or loss	M8AL-IIa-4 M9AL-IIa-2	LS3MP-PA-PSE-JHS-54				√ √ √
55	Define quadratic equations and other related terms and its properties		LS3MP-PA-PSE-JHS-55				√
56	Illustrate quadratic equations	M9AL-Ia-1	LS3MP-PA-PSE-JHS-56				√
57	Write a quadratic equation in standard form		LS3MP-PA-PSE-JHS-57				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
58	Solve quadratic equations using different methods: quadratic formula, factorization, completing the square	M9AL-Ia-b-1	LS3MP-PA-PSE-JHS-58				√
59	Illustrate quadratic functions		LS3MP-PA-PSE-JHS-59				√
60	Differentiate quadratic function from quadratic equation • human relationships: mother and daughter, husband and wife, teacher and students • coordinates of points • graphs of different equations		LS3MP-PA-PSE-JHS-60				√ √ √ √
61	Sketch the graph of a quadratic function using different methods	M9AL-Ig-h-i-1	LS3MP-PA-PSE-JHS-61				√
62	Describe the graph of quadratic function in terms of intercepts, axis of symmetry, and vertex	M9AL-Ig-h-i-1	LS3MP-PA-PSE-JHS-62				√
63	Find the discriminant of quadratic function then Describe its roots and graph	M9AL-Ig-h-i-1	LS3MP-PA-PSE-JHS-63				√
64	Find the maximum or minimum value of quadratic function: • maximum income • minimum sales require to breakeven		LS3MP-PA-PSE-JHS-64				√ √ √
65	Define variations and types of variations		LS3MP-PA-PSE-JHS-65				√
66	Illustrate situations that involve the following variations: (a) direct, (b) inverse, (c) joint, (d) combined • number of workers and time to finish the job (inverse variation) • speed of the car and distance traveled (direct variation)	M9AL-IIa-1	LS3MP-PA-PSE-JHS-66				√ √ √
67	Apply different variations in real-life situation		LS3MP-PA-PSE-JHS-67				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
68	Illustrate polynomial functions	M10AL-IIa-1	LS3MP-PA-PSE-JHS-68				√
69	Identify the key concepts of polynomial functions		LS3MP-PA-PSE-JHS-69				√
70	Evaluate functions		LS3MP-PA-PSE-JHS-70				√
71	Perform operations on functions		LS3MP-PA-PSE-JHS-71				√
72	Graph polynomial functions	M10AL-IIa-b-1	LS3MP-PA-PSE-JHS-72				√
73	Apply remainder theorem and factor theorem	M10AL-Ig-2	LS3MP-PA-PSE-JHS-73				√
74	Illustrate an arithmetic sequence	M10AL-Ib-1	LS3MP-PA-PSE-JHS-74				√
75	Identify sequence (whether arithmetic or not)	M9AL-IIa-1	LS3MP-PA-PSE-JHS-75				√
76	Determine the general equation of arithmetic sequence		LS3MP-PA-PSE-JHS-76				√
77	Find the unknown term/s of arithmetic sequence	M10AL-Ib-c-1	LS3MP-PA-PSE-JHS-77				√
78	Find the arithmetic series and other related unknown values		LS3MP-PA-PSE-JHS-78				√
79	Find the arithmetic mean/s	M10AL-Ib-c-1	LS3MP-PA-PSE-JHS-79				√
80	Illustrate a geometric sequence	M10AL-Id-1	LS3MP-PA-PSE-JHS-80				√
81	Identify sequence (whether geometric or not)	M10AL-Id-1 M10AL-Id-2	LS3MP-PA-PSE-JHS-81				√
82	Determine the general equation of geometric sequence		LS3MP-PA-PSE-JHS-82				√
83	Find the unknown terms of geometric sequence	M10AL-Ie-1	LS3MP-PA-PSE-JHS-83				√
84	Find the geometric series and other unknown values		LS3MP-PA-PSE-JHS-84				√
85	Find the geometric means	M10AL-Ie-1	LS3MP-PA-PSE-JHS-85				√
86	Solve problems that involve arithmetic and geometric sequences/series	M10AL-If-2	LS3MP-PA-PSE-JHS-86				√

Content Standard: Statistics and Probability
Performance Standard F: Demonstrate understanding and skill in the effective use of tables, graphs and statistics in presenting, analyzing and interpreting data, and dealing with uncertainty; and making predictions about outcomes for everyday problem solving

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
Data collection and representation							
1	Collect and record data, e.g.: • total number of registered voters who actually voted in the different barangays of a particular municipality • total number of votes cast for individual candidates by position in a barangay election (barangay captain and councilors) • total number of votes cast for individual candidates by position in a local election (mayor and councilors)	M1SP-IVg-1.1 M2SP-IVh-1.2 M3SP-IVg-1.3 M4SP-IVg-1.4 M5SP-IVg-1.5 M6SP-IVe-1.6 M7SP-IVb-1	LS3MP-SP-PSF-BL/LE/AE/JHS-1	√ √ √ √	√ √ √ √	√ √ √ √	√ √ √ √
2	Tally the frequency of occurrence, e.g., votes counted in a barangay election for candidates		LS3MP-SP-PSF-BL/LE/AE/JHS-2	√	√	√	√
3	Organize information collected in a frequency distribution table	M7SP-IVc-1	LS3MP-SP-PSF-JHS-3				√
4	Record data and systematically arranges these in a table	M1SP-IVg-2.1 M2SP-IVi-2.2 M3SP-IVg-2.3 M4SP-IVg-2.4 M5SP-IVg-2.5	LS3MP-SP-PSF-BL/LE/AE-4	√	√	√	
Graphs and data interpretation							
5	Describe the different kinds of graphs used to organize and present data in real life situations, e.g.: • pictograph, e.g., annual harvest production rates, daily egg production, harvest expenses, farmers planting different crops • bar graphs, e.g., survey results	M1SP-IVh-3.1 M2SP-IVi-3.2 M3SP-IVh-3.3 M4SP-IVg-3.4	LS3MP-SP-PSF-BL/LE/AE/JHS-5	√ √	√ √ √	√ √ √	√ √ √

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
	(political poll results, market research results, community needs assessment results), comparison of yields of rice in different fields, daily sales records, etc. • line graphs, e.g., monthly consumption of electricity indicated on an electric bill, peso-dollar fluctuations, dollar exchange rate, population growth rate • circle/pie graphs, e.g., distribution of labor force in different economic sectors, percentage of monthly family budget allocated/spent on certain items (food, clothing, housing, transport, expenses on education, etc.)	M5SP-IVh-3.5 M6SP-IVf-3.6 M7SP-IVd-e-1				√	
6	Identify the parts of a pictograph, bar graph, and line graph, i.e., title, legend, labels, and vertical and horizontal Axes		LS3MP-SP-PSF-JHS-6				√
7	Interpret the legend in a graph		LS3MP-SP-PSF-JHS-7				√
8	Read/Interpret data presented in a graph		LS3MP-SP-PSF-JHS-8				√
9	Make comparisons of data presented in a graph		LS3MP-SP-PSF-JHS-9				√
10	Draw inferences and conclusions based on analysis of data presented in graphs and tables		LS3MP-SP-PSF-LJHS-10				√
11	Analyze and draws conclusions from statistical data presented in graphs and tables	M7SP-IVj-1	LS3MP-SP-PSF-JHS-11				√
12	Construct pictographs, bar graphs, line graphs, and pie/circle graphs to organize, present, and analyze data from everyday life situations showing, e.g.: • daily egg production in poultry • daily/weekly sales of different sari-sari store items	M7SP-IVd-e-1	LS3CMP-SP-PSF- JHS-12				√ √ √
13	Translate data into graphs or charts		LS3MP-SP-PSF-JHS-13				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
14	Solve routine and non-routine problems using data presented in a pictograph without and with scales	M1SP- Ivh-4.1 M2SP-Ivi-4.2	LS3MP-SP-PSF- BL/LE/AE/JHS-14	√	√	√	√
Graphs and simple experiment							
15	Record favorable outcomes in a simple experiment (e.g., tossing a coin, spinning a wheel, etc.)	M4SP-IVi-9	LS3MP-SP-PSF-AE-15			√	
16	Express the outcome in a simple experiment in words, symbols, tables, or graphs	M4SP-IVi-10	LS3MP-SP-PSF-AE-16			√	
17	Explain the outcomes in an experiment	M4SP-IVi-11	LS3MP-SP-PSF-AE-17			√	
18	Solve routine and non-routine problems involving a simple experiment	M4SP-IVj-12	LS3MP-SP-PSF-AE-18			√	
19	Make simple predictions of events based on the results of experiments	M6SP-IVi-23	LS3MP-SP-PSF-AE-19			√	
Measures of central tendency and variability							
20	Explains the importance of Statistics	M7SP-IVa-1	LS3MP-SP-PSF-JHS-20				√
21	Pose problems that can be solved using Statistics (measures of central tendency and variability)	M7SP-IVa-2	LS3MPS-SP-PSF-JHS-21				√
22	Formulate simple statistical instruments	M7SP-IVa-3	LS3MP-SP-PSF-JHS-22				√
23	Illustrates the measures of central tendency (mean, median. mode) of a statistical data	M7SP-IVf-1	LS3MP-SP-PSF-JHS-23				√
24	Calculate the measure of central tendency of ungrouped and grouped data	M7SP-IVf-g-1	LS3MP-SP-PSF-JHS-24				√
25	Illustrate the measures of variability (range, average deviation, variance, standard deviation) of statistical data	M7SP-IVh-1	LS3MP-SP-PSF-JHS-25				√
26	Calculate the measures of variability of grouped and ungrouped data	M7SP-IVh-i-1	LS3MP-SP-PSF-JHS-26				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
27	Uses appropriate statistical measures in analyzing and interpreting statistical data	M7SP-IVj-1	LS3MP-SP-PSF-JHS-27				√
28	Draw conclusions from graphic and tabular data using measures of central tendency and variability	M7SP-IVj-2	LS3MP-SP-PSF-JHS-28				√
Experimental and Theoretical Probability							
29	Describe the meaning of probability such as —50% chance of rain and —one in a million chance of winning • the meaning of daily weather news • the chance of winning or losing in any local game	M6SP-IVg-19	LS3MP-SP-PSF-AE-29			√ √ √	
30	Describe experimental probability	M5SP-IVi-14	LS3MP-SP-PSF-AE-30			√	
31	Perform an experimental probability and records result by listing	M5SP-IVi-15	LS3MP-SP-PSF-AE-31			√	
32	Analyze data obtained from chance using experiments involving letter cards (A–Z) and number cards (0–20)	M5SP-IVi-16	LS3MP-SP-PSF-AE-32			√	
33	Solve routine and no routine problems involving experimental and theoretical probability	M5SP-IVj-17	LS3MP-SP-PSF-AE-33			√	
34	Create routine and non-routine problems involving experimental and theoretical probability	M5SP-IVj-18	LS3MP-SP-PSF-AE-34			√	
35	Discuss and illustrates the probability of simple and compound events		LS3MP-SP-PSF-AE-35			√	
36	State and Apply the fundamental principle of counting	M8GE-IVf-g-1	LS3MP-SP-PSF-JHS-36				√
37	Differentiate permutation from combination	M10SP-IIIC-2	LS3MP-SP-PSF-JHS-37				√
38	Apply the concepts of permutation and combination to real-life situations		LS3MP-SP-PSF-JHS-38				√

No.	Learning Competency	Code		BASIC LITERACY (K-G1)	ELEMENTARY		JUNIOR HIGH SCHOOL (Gr.7-10)
		K to 12	ALS		LE (Gr.2-3)	AE (Gr.4-6)	
39	Calculate probabilities in real-life situations		LS3MP-SP-PSF-AE/JHS-39			√	√
40	State and Apply the laws of probability in everyday life		LS3MP-SP-PSF-AE/JHS-40			√	√
Measures of position and mini-research							
41	Conduct a simple survey		LS3MP-SP-PSF-JHS-41				√
42	Distinguish between a sample and a population		LS3MP-SP-PSF-JHS-42				√
43	Determine the use of sampling		LS3MP-SP-PSF-JHS-43				√
44	Describe and differentiates the types of sampling techniques		LS3MP-SP-PSF-JHS-44				√
45	Identify the appropriate sample size using Slovenes Formula and other techniques		LS3MP-SP-PSF-JHS-45				√
46	Illustrate the following measures of position: quartiles, deciles , and percentile	M10SP-IVa-1	LS3MP-SP-PSF-JHS-46				√
47	Calculate a specified measure of position (e.g., 90^{th} percentile) of a set of data	M10SP-IVb-1	LS3MP-SP-PSF-JHS-47				√
48	Interpret measures of position	M10SP-IVc-1	LS3MP-SP-PSF-JHS-48				√
49	Solve problems involving measures of position	M10SP-IVd-e-1	LS3MP-SP-PSF-JHS-49				√
50	Use appropriate measures of position and other statistical methods in analyzing and interpreting research data	M10SP-IVh-j-1	LS3MP/SP-PSF-JHS-50				√

Learning Strand Code

Learning Strand 1	Communication Skills	LS1CS
Learning Strand 2	Scientific Literacy and Critical Thinking Skills	LS2SC
Learning Strand 3	Mathematical and Problem Solving Skills	LS3MP
Learning Strand 4	Life and Career skills	LS4LC
Learning Strand 5	Understanding the Self and Society	LS5US
Learning Strand 6	Digital Citizenship	LS6DC

ALS Level Code

Basic Literacy	BL
Elementary Level (Lower)	LE
Elementary Level (Advanced)	AE
Junior High School	JHS

Filipino	
Antas Elementarya (Mababa)	AEMB
Antas Elementarya (Mataas)	AEMT
Junior High School	AS

LEARNING STRAND 3: MATHEMATICAL AND PROBLEM SOLVING SKILLS

Sample: **LS3MP-NS-PSF-LE/AE/JHS-2**

LEGEND		SAMPLE	
First Entry	Learning Strand and Skills	Learning Strand 3 Mathematical and Problem Solving Skills	LS3MP
Uppercase Letter/s	Content Standard	Numeracy Skills	NS
	Performance Standard	Performance Standard	PSF
	Level	Basic Literacy/ Elementary Level (Lower)/ Elementary Level (Advanced)/ Junior High School	LE/AE/JHS
Arabic Number	Learning Competency	Learning Competency	2

Content Standard	Code
Numeracy Skills	NS
Number and Number Sense	NN
Geometry	G
Measurement	M
Patterns and Algebra	PA
Statistics and Probability	SP