

DAILY LESSON LOG OF M8GE-IVg-1 (Week Seven-Day One)

School		Grade Level	Grade 8									
Teacher		Learning Area	Mathematics									
Teaching Date and Time		Quarter	Fourth									
I. OBJECTIVES	Objectives must be met over the week and connected to the curriculum standards. To meet the objectives, necessary procedures must be followed and if needed, additional lessons, exercises and remedial activities may be done for developing content knowledge and competencies. These are assessed using Formative Assessment Strategies. Valuing objectives support the learning of content and competencies and enable children to find significance and joy in learning the lessons. Weekly objectives shall be derived from the curriculum guides.											
A. Content Standards	The learner demonstrates understanding of key concepts of probability.											
B. Performance Standards	The learner is able to formulate and solve practical problems involving probability of simple events.											
C. Learning Competencies/ Objectives	Learning Competency: 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-IVg-1) Learning Objectives: 1. List all possible outcomes in an experiment using a systematic listing; 2. Count the number of occurrences of an outcome in an experiment using a systematic listing; and 3. Demonstrate appreciation of listing the outcomes in an experiment using a systematic listing as an important skill needed to understand the concept of counting the number of occurrences of an outcome in an experiment.											
II. CONTENT	Probability of Simple Events											
III. LEARNING RESOURCES	teacher’s guide, learner’s module,											
A. References												
1. Teacher’s Guide	Pages 607-609											
2. Learner’s Materials	Pages 562-571											
3. Textbook pages												
4. Additional Materials from Learning Resource (LR) portal												
B. Other Learning Resources												
IV. PROCEDURES	These steps should be done across the week. Spread out the activities appropriately so that pupils/students will learn well. Always be guided by demonstration of learning by the pupils/ students which you can infer from formative assessment activities. Sustain learning systematically by providing pupils/students with multiple ways to learn new things, practice the learning, question their learning processes, and draw conclusions about what they learned in relation to their life experiences and previous knowledge. Indicate the time allotment for each step.											
A. Review previous lesson or presenting the new lesson	The teacher will present the different ways on listing the possible outcomes in an experiment and let the students answer the questions that follows: Experiment: Tossing a coin twice. A. <table border="1"><tr><td>1st toss \ 2nd toss</td><td>H</td><td>T</td></tr><tr><td>H</td><td>HH</td><td>HT</td></tr><tr><td>T</td><td>TH</td><td>TT</td></tr></table> B. 1st Toss Head Tail ↙ ↘ 2nd Toss Head Tail C. $S = \{ (H, H), (H, T), (T, H), (T, T) \}$ Questions: 1. What methods are used to represent the number of possible outcomes in the experiment of tossing a coin twice?			1st toss \ 2nd toss	H	T	H	HH	HT	T	TH	TT
1st toss \ 2nd toss	H	T										
H	HH	HT										
T	TH	TT										

	2. How many possible outcomes are there in tossing a coin twice? 3. What are those possible outcomes? 4. Which do you think is the easiest way of counting the number of occurrences of an outcome in an experiment using table, tree diagram or through systematic listing? Answers shall be draw from the students. Possible answers: 1. Using table, tree diagram and listing or systematic listing 2. 4 possible outcomes 3. {HH, HT, TH, TT} 4. tree diagram																				
B. Establishing a purpose for the lesson	The teacher lets the students realize that listing the outcomes in an experiment using systematic listing is an important skill needed to understand the concept of counting the number of occurrences of an outcome in an experiment.																				
C. Presenting examples/ instances of the new lesson	The teacher lets the students do the activity below by pair: A coin and a die is tossed simultaneously. How many possible outcomes are there? Illustrate your answer in a systematic listing. Answer Key: There are 12 possible number of outcomes in tossing a coin and a die simultaneously. These are { T1, T2, T3, T4, T5, T6, H1, H2, H3, H4, H5, H6}																				
D. Discussing new concepts and practicing new skills #1	The teacher discusses with the students the process of arriving at the answer of the second activity. Furthermore, he/she asks the students if they were able to get the correct number of outcomes. He/She tells them that in an experiment there are different ways on how to count the number of occurrence in an outcome and one of it is through systematic listing.																				
E. Discussing new concepts and practicing new skills #2	The teacher discusses thoroughly on how to count the number of occurrences of an outcome in an experiment through systematic listing as presented on pages 562-571 of the Learner’s Module.																				
F. Developing mastery (leads to formative assessment 3)	Working in groups of three, the teacher lets the students do Activity 8 item number 2 only on page 572-573 of the Learner's Module. Let the students illustrate the number of choices using a table and through systematic listing. Possible answers: <table><tr><td>Food/Drinks</td><td>Coffee (C)</td><td>Juice (J)</td><td>Hot Chocolate (H)</td><td>Tea (T)</td></tr><tr><td>Pancake (P)</td><td>PC</td><td>PJ</td><td>PH</td><td>PT</td></tr><tr><td>Waffles (W)</td><td>WC</td><td>WJ</td><td>WH</td><td>WT</td></tr><tr><td>Fries (F)</td><td>FC</td><td>FJ</td><td>FH</td><td>FT</td></tr></table> S = { PC, PJ, PH, PT, WC, WJ, WH, WT, FC, FJ, FH, FT} a. 3 c. 12 b. 4 d. f●d	Food/Drinks	Coffee (C)	Juice (J)	Hot Chocolate (H)	Tea (T)	Pancake (P)	PC	PJ	PH	PT	Waffles (W)	WC	WJ	WH	WT	Fries (F)	FC	FJ	FH	FT
Food/Drinks	Coffee (C)	Juice (J)	Hot Chocolate (H)	Tea (T)																	
Pancake (P)	PC	PJ	PH	PT																	
Waffles (W)	WC	WJ	WH	WT																	
Fries (F)	FC	FJ	FH	FT																	
G. Finding practical applications of concepts and skills in daily living																					
H. Making generalizations and abstractions about the lesson	The teacher summarizes the mathematical skill of counting the number of occurrences of an outcome in an experiment through a systematic listing.																				
I. Evaluating Learning	The teacher lets the students answer individually the formative assessment. Give what is asked. Illustrate your answer through systematic listing. 1. Mike has 4 shirts, and 3 pairs of pants. How many different outfits can he wear? 2. Anita's Pizza Corner offers 2 choices of salad, 4 kinds of pizza, and 3 different desserts. How many different 3-course meals can one order? Answer key: 1. Shirt(S); Pants(P) {(S1, P1); (S1, P2) ;(S1, P3); (S2, P1); (S2, P2); (S2, P3); (S3, P1); (S3, P2), (S3, P3); (S4, P1); (S4, P2); (S4, P3)}																				

	Therefore, there are 12 different outfits Mike can choose from. 2. Salad (S); Pizza (P); Desserts (D) <table><tr><td>S1, P1, D1</td><td>S1, P1, D2</td><td>S1, P1, D3</td></tr><tr><td>S1, P2, D1</td><td>S1, P2, D2</td><td>S1, P2, D3</td></tr><tr><td>S1, P3, D1</td><td>S1, P3, D2</td><td>S1, P3, D3</td></tr><tr><td>S1, P4, D1</td><td>S1, P4, D2</td><td>S1, P4, D3</td></tr><tr><td>S2, P1, D1</td><td>S2, P1, D2</td><td>S2, P1, D3</td></tr><tr><td>S2, P2, D1</td><td>S2, P2, D2</td><td>S2, P2, D3</td></tr><tr><td>S2, P3, D1</td><td>S2, P3, D2</td><td>S2, P3, D3</td></tr><tr><td>S2, P4, D1</td><td>S2, P4, D2</td><td>S2, P4, D3</td></tr></table> Therefore, there are 24 different 3-course meals can be ordered.	S1, P1, D1	S1, P1, D2	S1, P1, D3	S1, P2, D1	S1, P2, D2	S1, P2, D3	S1, P3, D1	S1, P3, D2	S1, P3, D3	S1, P4, D1	S1, P4, D2	S1, P4, D3	S2, P1, D1	S2, P1, D2	S2, P1, D3	S2, P2, D1	S2, P2, D2	S2, P2, D3	S2, P3, D1	S2, P3, D2	S2, P3, D3	S2, P4, D1	S2, P4, D2	S2, P4, D3
S1, P1, D1	S1, P1, D2	S1, P1, D3																							
S1, P2, D1	S1, P2, D2	S1, P2, D3																							
S1, P3, D1	S1, P3, D2	S1, P3, D3																							
S1, P4, D1	S1, P4, D2	S1, P4, D3																							
S2, P1, D1	S2, P1, D2	S2, P1, D3																							
S2, P2, D1	S2, P2, D2	S2, P2, D3																							
S2, P3, D1	S2, P3, D2	S2, P3, D3																							
S2, P4, D1	S2, P4, D2	S2, P4, D3																							
J. Additional activities or remediation	Four different books A, B, C, and D are to be arranged on a shelf. How many arrangements are possible? Illustrate your answer through systematic listing. Answer Key: Books A, B, C, and D <table><tr><td>ABCD</td><td>BACD</td><td>CABD</td><td>DABC</td></tr><tr><td>ABDC</td><td>BADC</td><td>CADB</td><td>DACB</td></tr><tr><td>ACBD</td><td>BCAD</td><td>CBAD</td><td>DBAC</td></tr><tr><td>ACDB</td><td>BCDA</td><td>CBDA</td><td>DBCA</td></tr><tr><td>ADBC</td><td>BDAC</td><td>CDAB</td><td>DCAB</td></tr><tr><td>ADCB</td><td>BDCA</td><td>CDBA</td><td>DCBA</td></tr></table>	ABCD	BACD	CABD	DABC	ABDC	BADC	CADB	DACB	ACBD	BCAD	CBAD	DBAC	ACDB	BCDA	CBDA	DBCA	ADBC	BDAC	CDAB	DCAB	ADCB	BDCA	CDBA	DCBA
ABCD	BACD	CABD	DABC																						
ABDC	BADC	CADB	DACB																						
ACBD	BCAD	CBAD	DBAC																						
ACDB	BCDA	CBDA	DBCA																						
ADBC	BDAC	CDAB	DCAB																						
ADCB	BDCA	CDBA	DCBA																						
V. REMARKS																									
VI. REFLECTION	Reflect on your teaching and assess yourself as a teacher. Think about your students’ progress. What works? What else needs to be done to help the pupils/students learn? Identify what help your instructional supervisors can provide for you so when you meet them, you can ask them relevant questions.																								
A. No. of learners who earned 80% of the evaluation																									
B. No. of learners who require additional activities for remediation who scored below 80%																									
C. Did the remedial lesson work? No. of learners who have caught up with the lesson.																									
D. No. of learners who continue to require remediation																									
E. Which of my teaching strategies worked well? Why did these work?																									
F. What difficulties did I encounter which my principal or supervisor can help me solve?																									
G. What innovation or localized materials did I use/ discover which I wish to share with other teachers	It is in the development of the lesson that localization and contextualization is done.																								

Prepared by:
MARICHU E. TORBIZO
MCCNHS