## DAILY LESSON LOG M8GE – IVg – 1 (Week Seven – Day Five)

School		Grade Level	Grade 8
Teacher			Mathematics
		Learning Area	
I. OBJECTIVES	Quarter Fourth  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)  The learner should be able to:  K: apply the fundamental counting principle in the given experiment.  S: count the number of occurrences of an outcome in an experiment using fundamental counting principle.  A: relate the usefulness of probability in real – life situation.		
II. CONTENT	FUNDAMENTAL COUNTING PRINCIPLE (DAY 5)		
III. LEARNING RESOURCES	Teacher's Guide, Learner's Module, Activity Sheets for Dependent Learning, Worksheets for Ir	ndependent Learning, Referen	ce Books
A. References			
1. Teacher's Guide pages	607 - 615		
2. Learner's Materials pages	562 - 583		
3. Textbook pages			
Additional Materials from     Learning Resource (LR)     portal			
B. Other Learning Resources	http://www.aaaknow.com/sta-basic-cntg.htm http://www.algebra-class.com/fundamental-counting-p https://www.mathopolis.com/questions/quiz.php	orinciple.html	
IV. PROCEDURES	These steps should be done across the week. Spread out the activities appropriately so demonstration of learning by the pupils/ students which you can infer from formative assess pupils/students with multiple ways to learn new things, practice the learning, question their learned in relation to their life experiences and previous knowledge. Indicate the time allotms	ment activities. Sustain learni r learning processes, and drav	ng systematically by providing
A. Review previous lesson or presenting the new lesson	The teacher will ask a volunteer learner to give a recapitulation of the previous meeting's discussion.  Warm-up Activity (For the class)  1. If you have 2 brown sneakers, 2 white sneakers, and 15 white t-shirts. How many different ways can you dress with the white sneakers and the t-shirts?  Possible Answer:  (2) (15) = 30 outcomes		
A. Establishing a purpose for the lesson	The teacher lets the students realize that fundamental counting principle is the easiest and quickest way to find the number of possible outcomes.		
A. Presenting examples/ instances of the new lesson	Working in pairs, the students will be asked to answer the given item below.  1. The Grade 8 year level is electing new year level officers. There are three candidates for president, four candidates for vice – president, four candidates for secretary, and two candidates for treasurer. How many possible combination of officers are possible?  2. Toss a coin five times. How many possible outcomes are there?		
B. Discussing new concepts and practicing new skills #1	The teacher will ask volunteer learners to present their answer to class for discussion and clarifications.		

2	Discussing new concepts and practicing new skills #2		
3.		<ul> <li>Think – Pair – Share</li> <li>The students will be asked to answer the following items below in pair.</li> <li>1. A seven question quiz has four true or false questions followed by three multiple choice questions. For each multiple choice question there are four possible answers. In how many different ways is it possible to answer the seven questions?</li> </ul>	
		Possible Answer:  1. True or False questions     Number of possible outcomes: 2     Number of test item: 4      Number of possible outcomes for true/false item: (2)(2)(2) or 2 <sup>4</sup> = 16 outcomes for true/false items  Multiple Choice Questions	
		Number of possible outcomes: 4 Number of test item: 3  Number of possible outcomes for multiple choice item: (4)(4)(4) or 4 <sup>3</sup> = 64 outcomes for multiple choice items  Number of Possible Outcomes for the Seven Questions: (16) (64) = <b>1024 outcomes</b>	
1	Finding practical applications of concepts and skills in daily living	The teacher will ask the learners of "What real-life situation can the fundamental counting principle be applied?"  Possible answer:	
3	Making generalizations and abstractions about the lesson	Pairing of clothes, food and beverages and etc  The teacher summarizes the mathematical skills or principles use to count the number of occurrences of an outcome in an experiment using fundamental counting principle.  a. How did you use the fundamental counting principle in counting the number of occurrences of an outcome in an experiment?  b. Which is easier to use, tree diagram or fundamental counting principle? Why?	
4	Evaluating Learning	<ol> <li>Individually the student will be asked to answer the given exercise below.</li> <li>Derek must choose a four-digit pin for his cellphone. He has to choose from the digit 0 to 9. How many different possible PIN numbers can Derek have?</li> <li>For her literature class, Riza has to choose one novel to study from a list of four, one poem from a list of six, and one short story from the list of five. How many different choices does Riza have?</li> </ol>	
2	. Additional activities or	Possible Answer:  1. (10) (10) (10) = 10,000 outcomes  2. (4) (6) (5) = 120 outcomes.	
	remediation		
V.	REMARKS	Reflect on your teaching and assess yourself as a teacher. Think about your students' progress. What works? What	
	REFLECTION	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.	
Α.	No. of learners who earned 80% of the evaluation		
В.	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	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

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