LEARNING AS ONE NATION
Expanded Project

Math 10_Q4_PT

JHS LEARNING ACTIVITY

Name: _____ **Grade/Score:** _____
Grade and Section: _____ **Date:** _____

Subject *(Check or choose from below.)*

- ☐ Religion/Values Education
- ☐ Natural Sciences
- ☐ Araling Panlipunan
- ☐ Filipino
- ☐ English
- ☐ Math
- ☐ TLE / ICT
- ☐ MAPEH
- ☐ HGP _____

Type of Activity *(Check or choose from below.)*

- ☐ Concept Notes
- ☐ Skills: Exercise / Drill
- ☐ Performance Task
- ☐ Illustration
- ☐ Formal Theme
- ☐ Informal Theme
- ☐ Others: _____

Activity Title: Solving Problems involving Permutation and Combination

Learning Target: To solve problems with permutations and combinations

References: *(Author, Title, Pages)*
https://www.basic-mathematics.com/permutation-word-problems.html
https://www.basic-mathematics.com/combination-word-problems.html
V.J. Dublin, A. Cagampang, CVIF Learning Activities

For your Fourth Quarter performance task, choose one (1) problem given below and show how to solve it.

a) Twenty motorcycles compete in the event. First, second, and third places will be awarded to the three quickest motorcycles. With 20 motorcycles, how many different first, second, and third place configurations are possible?
b) A photographer is attempting to get images of five kids, four ladies, and three men. How many different ways can the photographer arrange the men, ladies, and kids if they are always together?
c) Ten of the class's thirty students will be used to evaluate the effectiveness of a new arithmetic game. How many ways does the teacher have to choose ten students?

Instructions:

1) Use a long bond paper with 0.5-inch margin on all sides and with a portrait orientation.
2) Present your solution neatly and step by step.
3) Write your name on the upper-left part of your paper.
4) The design of your paper must be related to the problem you have chosen.
5) Grading Criteria:

Content	- 60%
Presentation	- 30%
Punctuality	- 10%
Total	**- 100%**