LEARNING AS ONE NATION
Expanded Project

Math 10_36

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: The Difference Between Permutation and Combination

Learning Target: To differentiate permutation from combination.

References: *(Author, Title, Pages)*
F.B. Orines, et al., Next Century Mathematics, pp. 406-408
V.J.A. Dublin, CVIF Learning Activities

Permutation is an arrangement of objects in which the order matters. In combination, the order of the objects is not considered.

Example: From the letters {C,V,I,F} determine the number of permutations and combinations that can be created taken 2 letters at a time.

Permutation	Combination
CV	CV or VC
VC	
CI	CI or IC
IC	
CF	CF or FC
FC	
VI	VI or IV
IV	
VF	VF or FV
FV	
IF	IF or FI
FI	

Therefore, there are 12 permutations and only 6 combinations. This is because in a combination the order is not important.

Exercises: Determine whether the given situation is a combination or permutation problem. Write C for combination and P for permutation.

_____1) A club must elect five (5) different officers from ten (10) candidates.
_____2) Seven (7) different Mathematics books are arranged on a shelf.
_____3) A committee of eight (8) members is to be chosen from ten (10) students.