Diocese of Imus Catholic Educational System, Inc.
Office of the Superintendent of the Diocesan Schools
Office of Curriculum and Instruction
LEARNING ACTIVITY SHEET

Name: _____ Expert Teacher: _____ Quarter: 2 Act. #: 2
Grade/Year & Section: _____ Subject: Mathematics 10 Date: _____
Please check the box for the type of the activity:
☒ Concept Notes ☐ Illustrations/Examples ☒ Seat work ☐ Written Work *(Pls. Specify WW:* _____
☐ Quiz ☐ Performance Task ☐ Meaning-making Activity ☐ *Others:* _____
Activity Title: Solving Word Problem Involving Sequence
Learning Target/Competency: *The learner will* solve problems involving sequences.
Values/Graduate Attributes: *The learners will become* systematic and orderly.

Reference(s) & Author(s) Grade 10 Mathematics Patterns and Practicalities Gladys C. Nievera Phd. Page(s) No. 53-65

I. CONCEPT/DIGEST

Steps in Solving Word Problems

1. Read and understand the problem.
2. Identify/determine the given quantities.
3. Solve the problem.

II. EXAMPLE

1. A company offers Reegan a starting salary of ₱200, 000 with raises of ₱ 20, 000 per year. What will be his salary on the 10th year?
   A. Understand the problem and determine the given.
   The given is:
   $a_1 = 200{,}000 \quad d = 20{,}000 \quad n = 10$
   B. Solve the problem.
   In solving the problem, we are going to use the formula: $a_n = a_1 + (n-1)d$
   Since, we are looking for the nth term of the sequence.
   $a_n = a_1 + (n-1)d$
   $a_{10} = 200{,}000 + (10-1)20{,}000$
   $a_{10} = 200{,}000 + (9)20{,}000$
   $a_{10} = 200{,}000 + 180{,}000$
   $\boldsymbol{a_{10} = 380{,}000}$
   C. ANSWER: On the 10th year, his annual salary will be ₱380, 000.

III. EXERCISES

Directions: Read, analyze then solve. Show your solution.

1. A theater has 30 seats in the first row, 32 seats in the 2nd row, increasing by 2 seats per row for a total of 26 rows. How many seats are there in the theater?
2. A culture of bacteria doubles every two hours. If there are 500 bacteria at the beginning, how many bacteria will there be after one day?
3. Wild geese fly in V-formation. A formation of wild geese has 17 geese in the last row, 16 geese in the second to the last row, 15 geese in the next row, and so on. How many geese are there altogether?