OUR OWN HIGH SCHOOL, AL WARQA'A, DUBAI

HOLIDAY HOME WORK - GRADE: X

MATHEMATICS

(A) Write the following activities in your activity book:

1. Verify that the given sequence is an Arithmetic
   Progression by activity method:
   - (i)   1, 4, 7, 11, 15,………
   - (ii)   1, 2, 4, 7, 11, 16,…………….

2. The electricity bills(in rupees) of 40 houses in a
   locality are given below:
   116, 127, 107, 100, 80, 82, 91, 101, 65, 95, 87, 81,
   105, 129, 92, 75, 89, 78, 87, 81, 59, 52, 65, 101, 115,
   108, 95, 65, 98, 62, 84, 76, 63, 128, 121, 61, 118,
   108, 116, 130
   - (i) Classify the data (one class interval is 50 – 60)
   - (ii) Calculate the mean, median and mode for the data.
   - (iii) Draw the cumulative frequency graphs (both less
            than and more than) for the data and hence find
            the median.

(B) Make the following working models:

1. Make a Clinometer to find angles of elevation and
   depression of distant objects and use it to measure
   heights or depths of distant objects.

2. Construct a Simple Height Estimator and use it to
   estimate the height of a distant object.
   OR
   Make the model of a combination of solids of equal
   radii using cylinder, cone, hemisphere, cuboid, cube
   etc.

Note: Please submit your completed activity book and the
projects on or before 15th
          of September 2011.

****