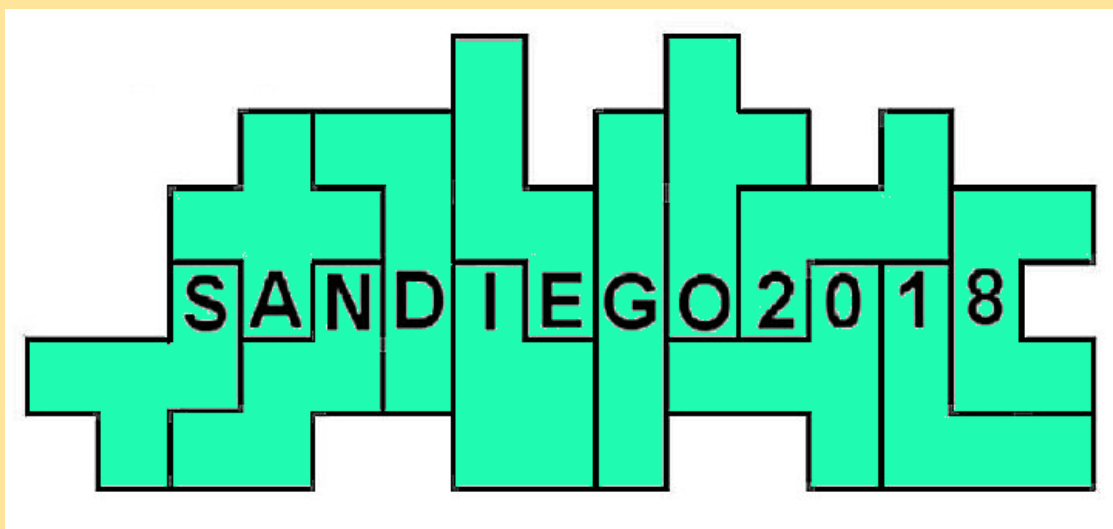# 38 = 12

Exchange puzzle for IPP38
San Diego, California, August 2018
Designed by Kate Jones, kate@gamepuzzles.com
Made by Kadon Enterprises, Inc.

Goal: Arrange the 12 pentominoes without overlapping so that each letter of the inscribed banner

is covered by a different pentomino and so that the entire perimeter of the assemblage is exactly 38 units in length. Here is a sample solution with a perimeter of 54:

38 words: Find 38 different English/American words of exactly 4 letters, each formed from the letters of SANDIEGO, with no duplicate letters. The usual rules apply: no proper names, no acronyms, no abbreviations. Plurals are allowed. Yes, you may use a dictionary.

Latin square: Since **SANDIEGO2018** consists of 12 all-different characters, you may also amuse yourself by building a Latin square of 12x12 with all 12 characters occurring in all 12 horizontal rows and all 12 vertical columns and *never a duplicate in any line*. And further, that there will also be 12 rectangles of 3x4 with all 12 different characters. A grid page is enclosed for your convenience. The pencil and eraser you need to supply yourself.