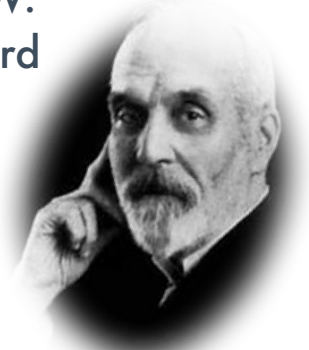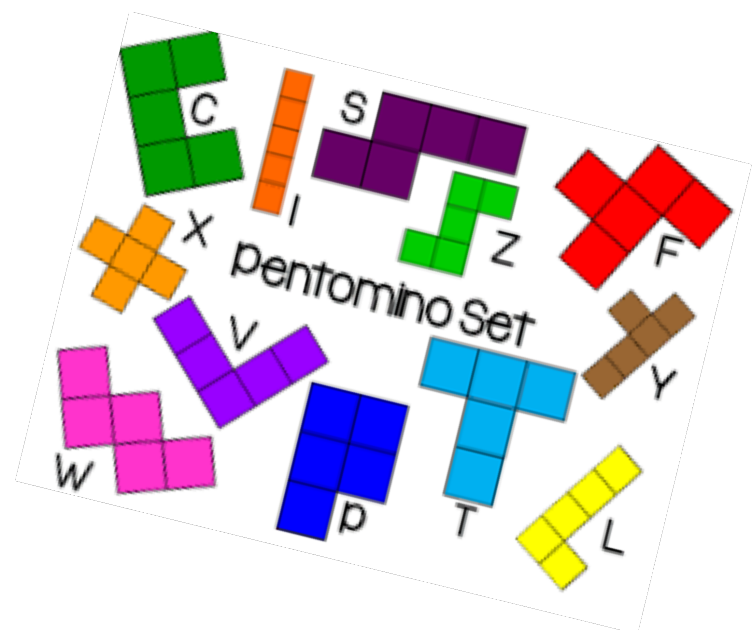# PENTOMINOES

Pentominoes are thought to have been "invented" by Solomon W. Golomb (on the left) in 1953 during a talk he gave to the Harvard Mathematics Club. He is credited with coining the name pentominoes, but they have been around since a much earlier time. Henry Ernest Dudeney (on the right), a great English inventor of puzzles, created the first pentomino problem, which was published in the Canterbury Puzzles in 1907.

Pentominoes are shapes that use five square blocks joined edge to edge to form various combinations. There are twelve possible shapes in a set of unique pentominoes, named T, U, V, W, X, Y, Z, F, I, L, P, and N. An easy way to remember all the letters in a pentominoes set is to look at the word, FILiPiNo, and remember the end of the alphabet, TUVWXYZ.

There are about as many puzzles and games using pentominoes as there are people who play with them. Here are a few examples.

- Use all 12 pentomino shapes to create rectangles of varying dimensions A standard pentomino puzzle is to arrange a set of the twelve possible shapes into rectangles without holes - 3x20 (2 solutions only), 4x15 (386 possible solutions), 5x12 (1010 possible solutions), 6x10 (2339 possible solutions).

- You can design more figures beside rectangles. Best you don't plan a pattern, but start working. Then it is easier to discover new figures.

- You can also lay pentominoes so that the inside or the border form rectangles.

- You can form rectangles with isolated holes or figures with as many isolated holes as possible (there are only two solutions for number 3!).
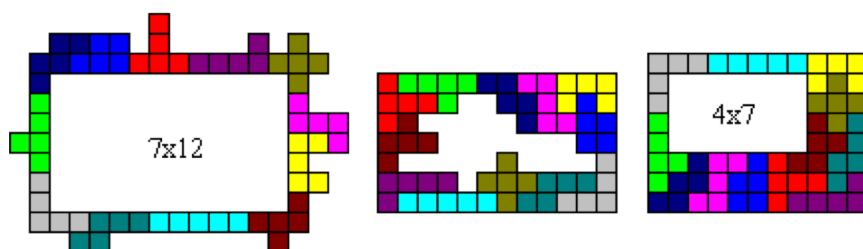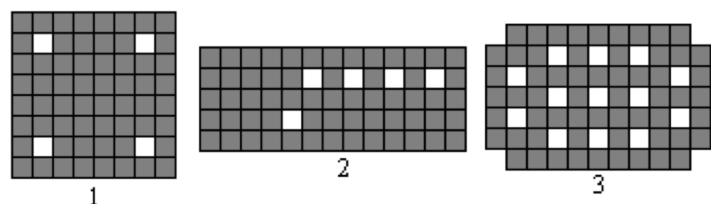
- You can build a pentomino with triple magnification. You need nine pieces. Three pieces are left. It is more difficult not to use pentomino concerned.