## Pentominoes

Pentominoes is the set of shapes created by combining 5 squares or cubes, with faces touching each other, in every possible combination. Mirror images and rotations do not count as additional combinations.

With this, we achieve 12 unique shapes, as seen below:


They tend to resemble the following letters, respectively:
F I L N P T U V W X Y Z

Using all 12 pieces, you can make:

A $6 \times 10$ rectangle (see photo below)
A $5 \times 12$ rectangle
A $4 \times 15$ rectangle
A $3 \times 20$ rectangle
An $8 \times 8$ square with 4 pieces missing in the middle (see photo below)
An $8 \times 8$ square with 4 pieces missing in the corners
An $8 \times 8$ square with 4 pieces missing almost anywhere
A $3 \times 4 \times 5$ cube (see photo below)
A $2 \times 5 \times 6$ cube
A $2 \times 3 \times 10$ cube
A 2D replica of each piece, only three times larger
A $5 \times 13$ rectangle with the shape of 1 pentomino piece missing in the middle
Shapes with jagged edges
Tessellations using a pentomino
Hundreds of other shapes!

