

HEXOMINOES

In the previous activity you have seen that **pentominoes** can be obtained analyzing all the possibilities of fitting 5 squares (so that the pentomino cannot move), joined completely to each other by a side, in **rectangular boxes** of 1×5 , 2×4 , 2×3 and 3×3 . In a similar way, **hexominoes** also are possible to be obtained looking for all the possibilities of fitting 6 squares in **rectangular boxes** (the box would be the frame in which it would exactly fit the hexomino), whose dimensions in this case could only be: 1×6 , 2×5 , 2×4 , 2×3 , 3×4 y 3×3 . Thus, it is easier to find the 35 possible hexominoes, that are distributed in the following way:

Dimensions of the frame-box	Number of hexominoes
1x6	1
2x5	5
2x4	6
2x3	1
3x4	15
3x3	7

- ✎ **Find and draw** the 6 different hexominoes that fit a box of dimension 2×4 and the 15 that fits a box 3×4 .

In order to find them all use the 6 squares and the boxes of dimensions 2×4 and 3×4 that you have. When you find one **draw it** in a squared paper to know that you have already got it and not to repeat it. Use the fitting squares when you have doubts about the equality of two hexominoes.

- ✎ **Which** of the hexominoes that you have found and drawn are a flat development of a cube?

It is better to do these activities with a mate in a similar way than the ones in the activity of pentominoes.

YOU WILL NEED:

A box 2×4 , a box 3×4 , 6 squares, 12 fitting squares, pencil a one squared paper.