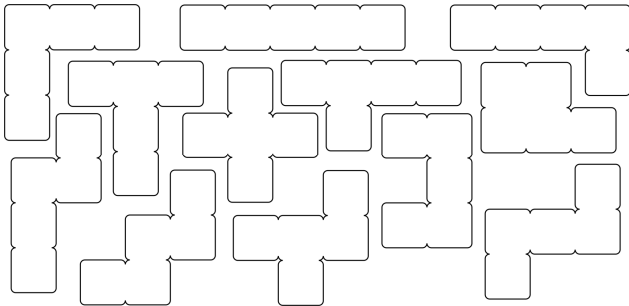


A strategy game for 2 players by  
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## INTRODUCTION

**Pent-Up** is a tile-stacking game that uses pentomino-shaped tiles. A **pentomino** is a piece composed of five congruent squares, connected along their edges. There are 12 different pentominoes:



The pentominoes

Players alternate turns placing one of their tiles according to some simple rules, trying to get the most of their pieces on the topmost layers when the game ends.

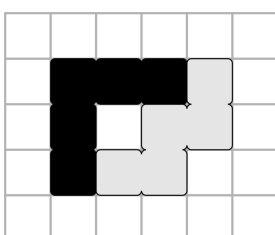
Note that some of the tiles are not symmetric, and can be placed either side up.

## EQUIPMENT

Each player has 12 different pentominoes of the same colour (black or white). The border of the tiles is lightly indented for clarity. The game also includes a case for storage.

## HOW TO PLAY

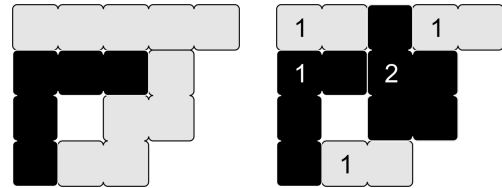
White starts by placing a white tile on the playing surface. Black then places a black tile adjacent to it so that it fits within an imaginary orthogonal grid.



Example of opening (imaginary grid drawn in light grey)

From now on, players alternate turns placing **any** tile of their colour according to the following rules:

- a) The tile must be aligned with the orthogonal grid.
- b) The selected tile must be placed on the highest level on which it can be placed legally.
- c) The tile must be placed either on the table and adjacent to a piece already on the table, or atop at least 2 tiles, regardless of their colour.
- d) The tile must lie flat, with every square directly supported, either by the table or by a lower tile.



Example: White places the 1x5 piece on Level 1. Black then chooses his 'b' piece, and places it on Level 2, for it is mandatory to do so. Level heights are indicated with numbers for clarity. (Black had more places to play the 'b'. Can you find them?) Notice that there was only 1 black pentomino that could have been placed on Level 1. Do you know which one?

## GAME END

The game ends when all tiles have been placed. The player with the most tiles on the highest level wins (so, if the stack is 5 levels high, look at Level 5). In case of a tie, the 2<sup>nd</sup>-highest level, then the 3<sup>rd</sup>-highest level, and so on.

## STRATEGIES

Rule 'b' (mandatory placement on the topmost level) is the key for winning the game. Force your opponent to place 2 adjacent tiles on the topmost level, so you can place one of yours on top of them. But be careful: Timing is important. If you force a placement too soon or too late, you will lose the game!

## VARIANT

Play as usual, but the player with most tiles on the **lowest** level wins.

## PUZZLES

1. Can you reach the 6<sup>th</sup> level placing the tiles according to the rules?
2. For this puzzle, ignore the mandatory stacking rule. Pick any black tile. Fully surround it with the lowest number of white tiles possible (all edges of the black tile must be touching white tiles). Can you then fully surround the white tiles with the remaining black tiles?

If you like this game try also **SEVEN**.