

## Checkerboard Tetrominoes



Welt der Geduldspiele

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updated 30. 5. 2024 | published 30. 5. 2024

### Summary

Pack 9 of the 10 one-sided checkered tetrominoes in a 6x6 square or all 10 into different rectangles.

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Tags: [puzzle](#) [chessboard](#) [tetromino](#) [checkerboard](#)  
[packingpuzzle](#) [polyomino](#)

#### Puzzle description:

There are 10 different one-sided checkered tetrominoes which should be packed into a square or a rectangle with the correct checkerboard pattern.

The first goal of the puzzle is to select nine of the ten tetrominoes and pack them into a 6x6 square. The tray contains a space for the spare tetromino.

Note that a T-tetromino cannot remain as a spare tetromino, this can be shown with the usual parity argument. For eight different spare tetrominoes (except the T-tetromino) you have eight different tasks.

Additional goals are

- Fill a 5x8 rectangle with all tetrominoes.

- Fill a 4x10 rectangle with all tetrominoes.
- Difficult: Fill two 4x5 rectangles using all tetrominoes.

If you can read German: Mehr Informationen gibt es in <https://welt-der-geduldspiele.blogspot.com/search?q=3D-Druck>

Puzzle difficulty:

The puzzle may look easy, but some tasks are difficult. The number of solutions varies from task to task.

Printing instructions:

The main color (usually gray or black) is used for the pieces and half of the caps. A second color is needed for half of the caps for the checkerboard pattern. The caps can easily be snapped onto the pieces.

For the 10 pieces you need

- 2 copies of the tetrominos L4, L4M (mirrored) and T4, printed in the main color;
- 1 copy of the remaining parts I4, O4 , Z4 and Z4M, printed in the main color;
- 18 caps printed in the main color,
- 18 caps printed in the second color.

A tray for the 6x6 checkerboard with space for a spare part also is provided. The tray was designed using PuzzleCAD: <https://www.thingiverse.com/thing:3198014>

Prints are fine with no supports. Snap the caps onto the different parts as in the picture. The caps are printed upside down, so the pieces will have a very flat surface.

Be sure to use the correct checkerboard pattern for the pieces.

I printed the puzzle in PLA at 0.1 mm layer height.

## **Print Settings**

### **Printer Brand:**

Prusa

### **Printer:**

Mini+

**Filament:** Grey and yellow

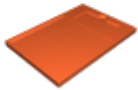
Category: Puzzles

## Model files



**checkerboard\_puzzle-part\_l4.stl**

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**checkerboard6x6-tray.stl**

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**checkerboardcap2.stl**

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**checkerboard\_puzzle-part\_l4m.stl**

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**checkerboard\_puzzle-part\_z4.stl**

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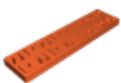
**checkerboard\_puzzle-part\_t4.stl**

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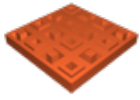
**checkerboard\_puzzle-part\_z4m.stl**

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**checkerboard\_puzzle-part\_i4.stl**

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## checkerboard\_puzzle-part\_o4.stl

[Find source .stl files on Thingiverse.com](#)

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