



Perfect Square Puzzle 112x112

W Welt der Geduldspiele

VIEW IN BROWSER

updated 7. 5. 2024 | published 7. 5. 2024

Summary

Pack the 21 squares of different size into the square tray.

[Toys & Games](#) > [Puzzles & Brain-teasers](#)

Tags: [packingpuzzle](#)

A square is called perfect squared square if it can be filled completely with squares of different integer side length. This nice mathematical feature can obviously be turned into a puzzle.

The smallest perfect squared square has side length 112 and consists of 21 squares. This smallest squared square was found by A. J. W. Duijvestijn in 1978, see https://en.wikipedia.org/wiki/Squaring_the_square.

The puzzle comes with a tray and the square pieces. Their side length is printed on one side (except for the tiny square with side length 2). If the puzzle is solved you can turn over all pieces to get an optically pleasing flat surface.

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

Printing instructions:

The pieces are printed in three colors for optical reasons only.

The printing size of the puzzle is 1.5mm per unit.

I printed the puzzle in PLA at .1mm layer height.

Puzzle difficulty: The fact that the square has to be filled without holes makes the puzzle not too difficult. Simple calculations with the side lengths can help to find fitting pieces. You cannot be sure that adjacent pieces will have different colors.

Nevertheless, the higher number of pieces increases the difficulty compared to the perfect rectangle with ten pieces at <https://www.thingiverse.com/thing:4883224>.

For general information about perfect rectangles and squares, see <http://www.squaring.net/>.

Print Settings

Printer Brand:

Prusa

Printer:

Mini

Rafts:

No

Supports:

No

Resolution:

200

Infill:

38

Filament: Prusament PLA

Category: Puzzles

Model files



square_11_150.stl



square_07_150.stl



square_33_150.stl



square_29_150.stl



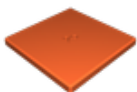
square_50_150.stl



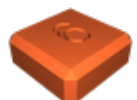
square_09_150.stl



square_42_150.stl



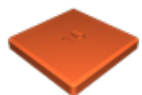
square_25_150.stl



square_06_150.stl



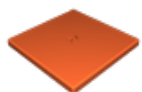
square_37_150.stl



square_16_150.stl



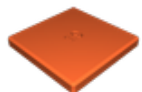
square_02_150.stl



square_27_150.stl



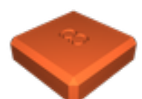
tray_112x112_150.stl



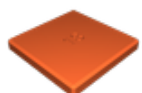
square_19_150.stl



square_17_150.stl



square_08_150.stl



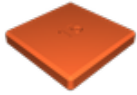
square_18_150.stl



square_24_150.stl



square_04_150.stl



square_15_150.stl



square_35_150.stl

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

License ©

This work is licensed under a
Creative Commons (4.0 International License)



Attribution

- ✖ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✓ | Commercial Use
- ✓ | Free Cultural Works
- ✓ | Meets Open Definition