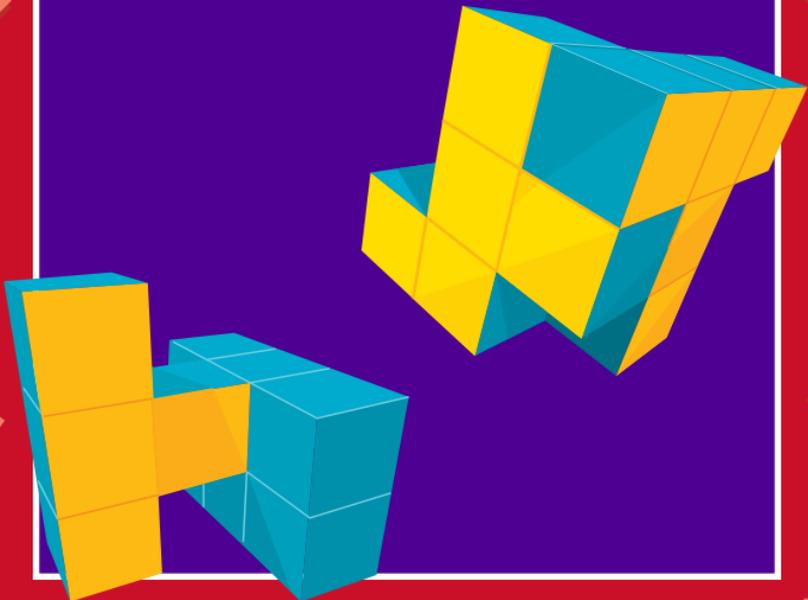
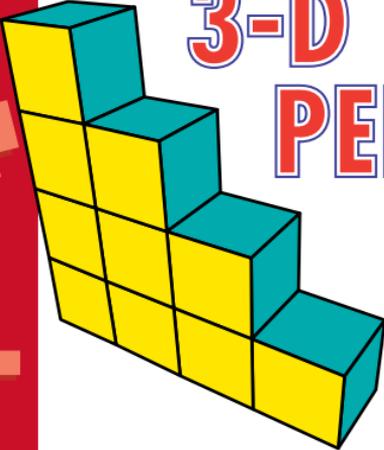




- **Over 50 Geometric Puzzles**
- **3 Levels of Challenge**
- **Hours of Brain-Twisting Fun**





3-D PENTOMINO puzzle

WHAT IS A 3-D PENTOMINO PUZZLE?

The name pentomino is taken from the greek word *penta*, meaning “five,” and *domino* meaning two squares joined edge to edge. *3-D Pentominoes* are Learning Resources’ updated version of this classic geometric puzzle consisting of 12 unique pieces. Each piece is formed by joining five identical cubes edge to edge. The 12 pieces resemble the letters of the alphabet. They are listed below:



F



I



L



N



P



T



U



V



W



X



Y



Z

BRAIN-TWISTING FUN FOR KIDS AND ADULTS!

Filled with more than 50 puzzles, this booklet will get you started on mastering the mysteries of the *3-D Pentomino Puzzle*. As puzzles are solved and new patterns are created, an intuitive understanding of geometric and spatial relationships naturally develops. *3-D Pentominoes* sharpen math and thinking skills through hands-on play!

The puzzles provided are presented by level of difficulty.

	<u>Skill Level</u>	<u>Number of Pieces Used</u>
Mildly Perplexing Puzzles	Level 1	2
Brain-Twisting Puzzles	Level 2	3
Mind Boggling Puzzles	Level 3	4

Many of the puzzles may appear simple at first --- but don't be surprised. Learning to see and solve problems three-dimensionally takes practice. Use the yellow sides of the pentomino pieces as visual clues. Some puzzles have more than one solution. Just in case you're stumped, solutions showing how the pieces go together are found on pages 17 to 23.

THE SUPER CHALLENGE

For expert puzzlers, we've included a super challenge: build a 3-D rectangle using all 12 pentomino pieces. Side views of the completed puzzle are provided as hints.

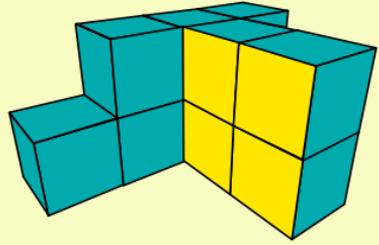
GOING FURTHER

Create a personalized library of puzzles using *3-D Pentominoes*. Kids like creating animals or things from the 3-D pieces. Younger children will enjoy using the pieces to fill flat outlines of animals like elephants or ducks. Outlines can be traded with friends.

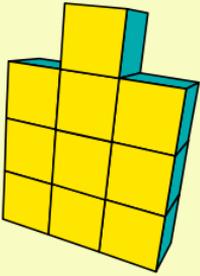
Encourage artistic creativity by tracing around a pentomino piece and creating a pattern or design. Move the block and trace around it again. Continue the pattern until the entire page is filled. You can also try to trace around multiple pentomino pieces. The resulting masterpiece can then be colored and framed!

Note: You can use the back of this booklet as a guide to fit your pieces into the box for storage.

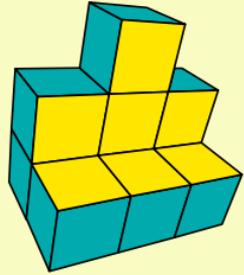
Mildly Perplexing Puzzles: Level 1



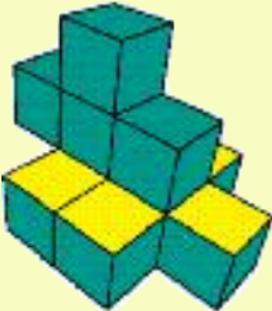
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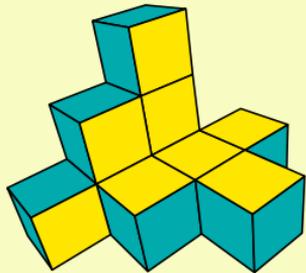
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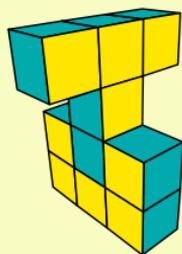
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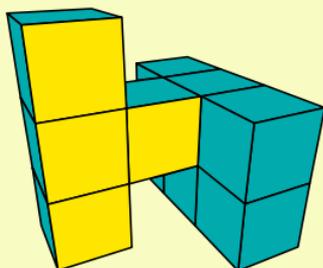
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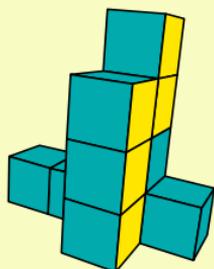
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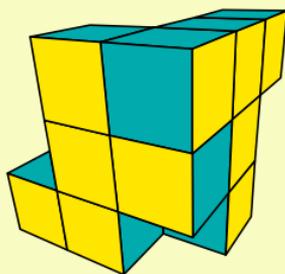
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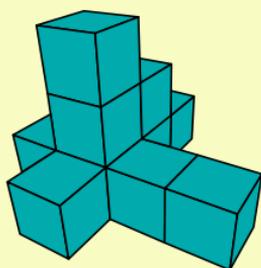
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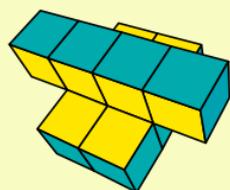


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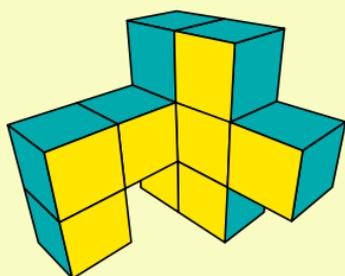


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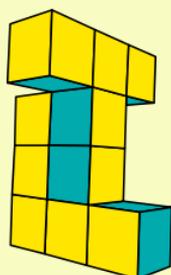




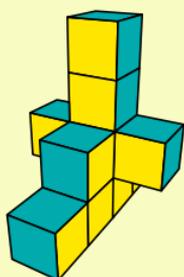
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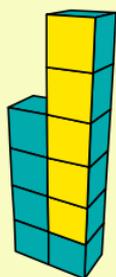
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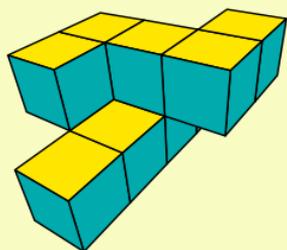
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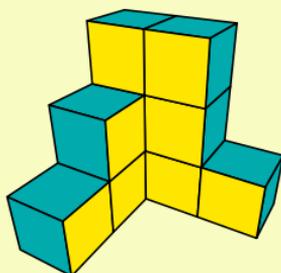
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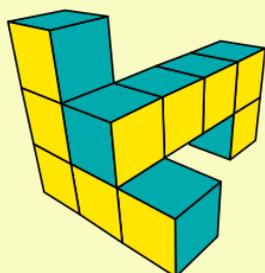
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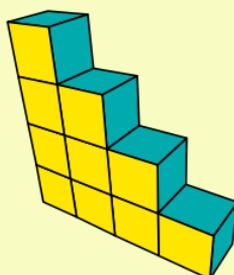
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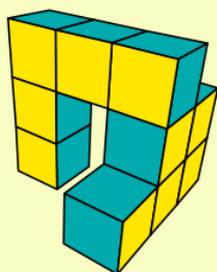
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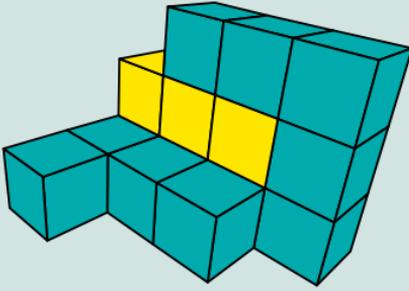
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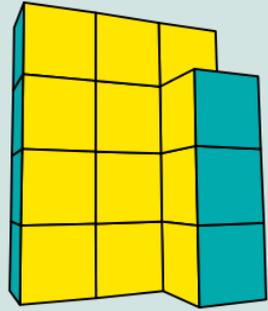
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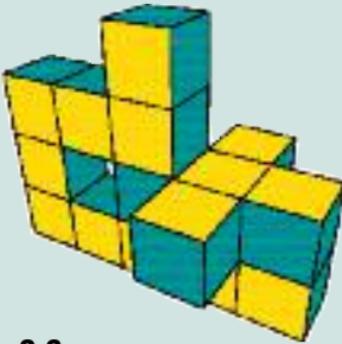
Brain Twisting Puzzles: Level 2



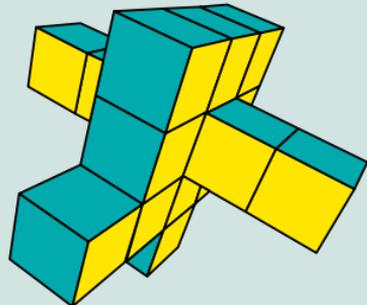
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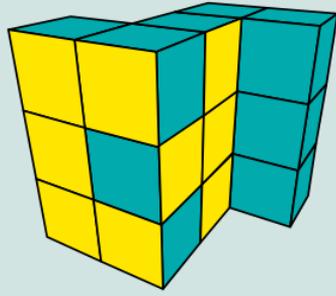
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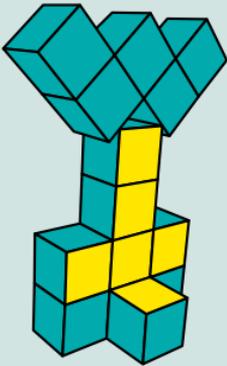
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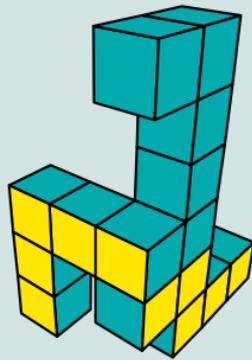
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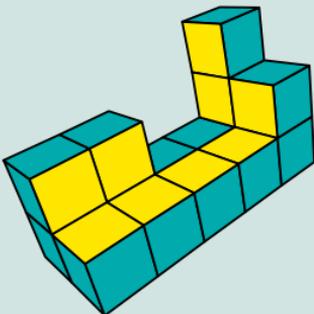
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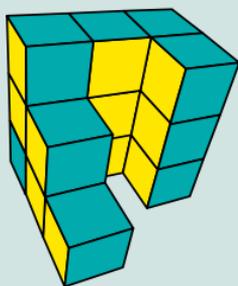


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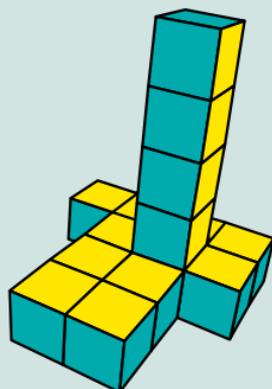


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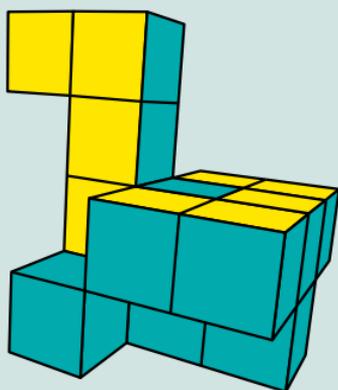




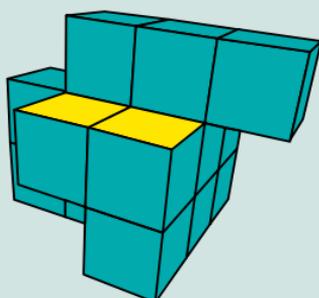
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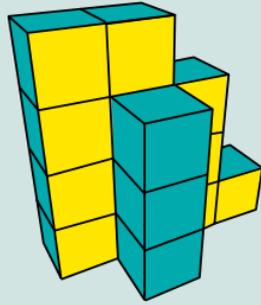
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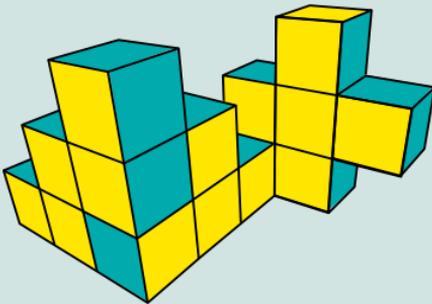
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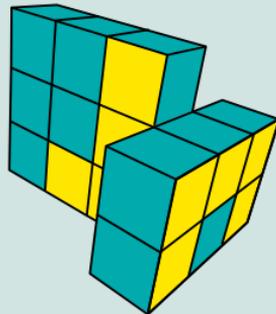
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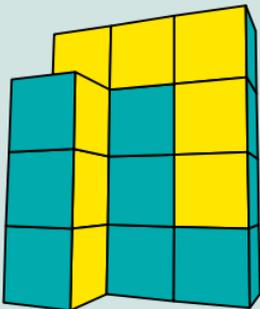
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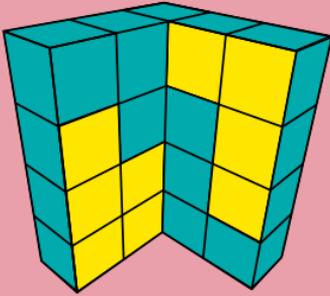
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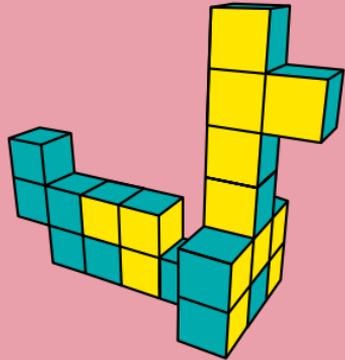
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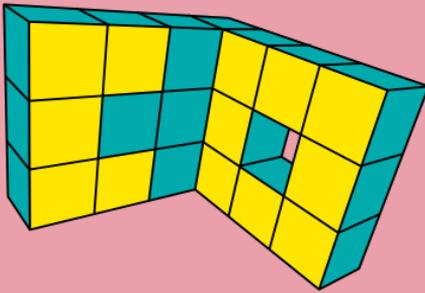
Mind Boggling Puzzles: Level 3



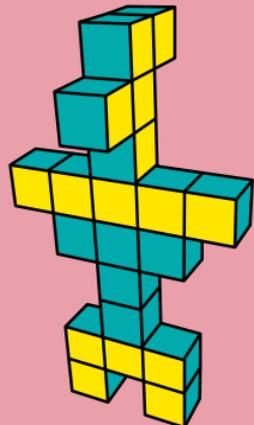
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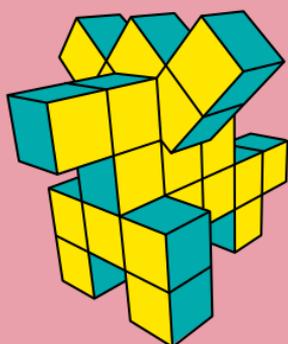
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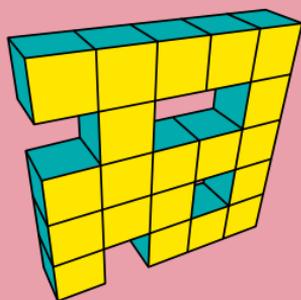
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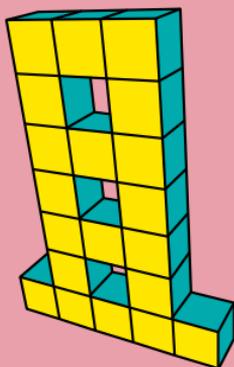
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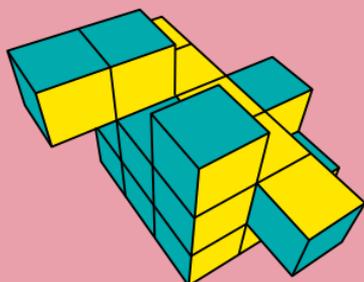
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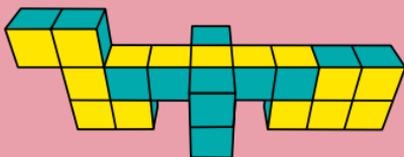


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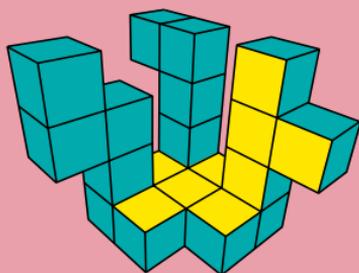


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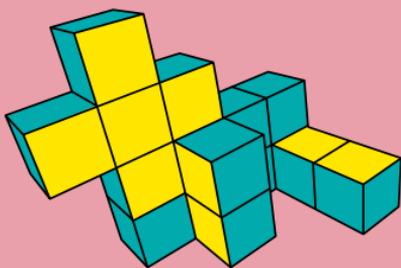




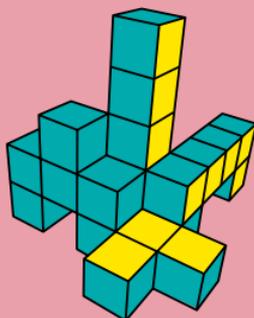
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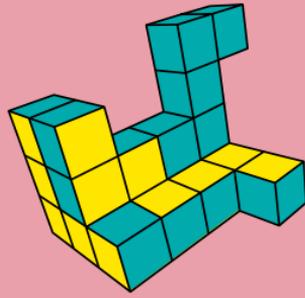
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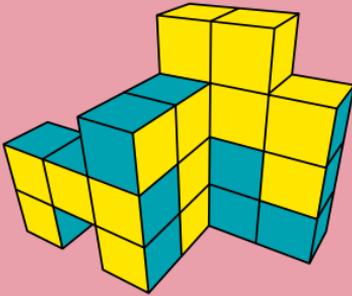
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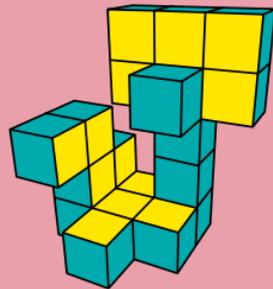
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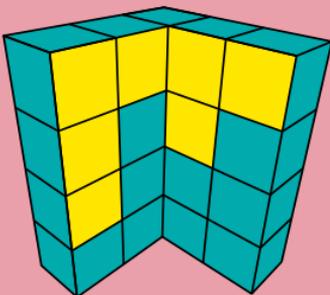
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3.14



3.15

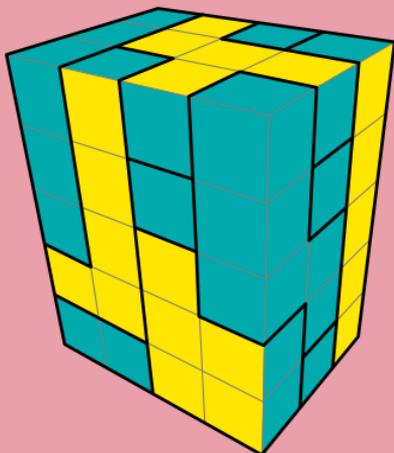


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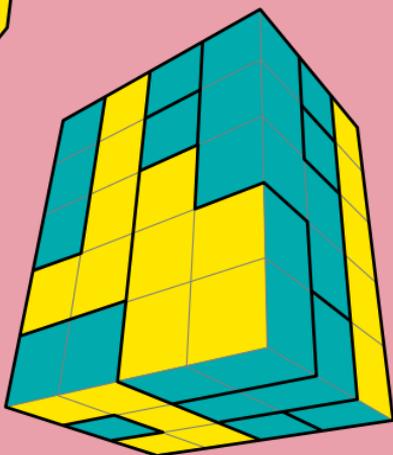


Super Challenge Puzzle

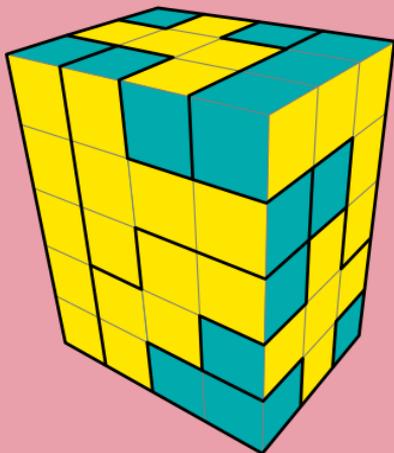
Front Top



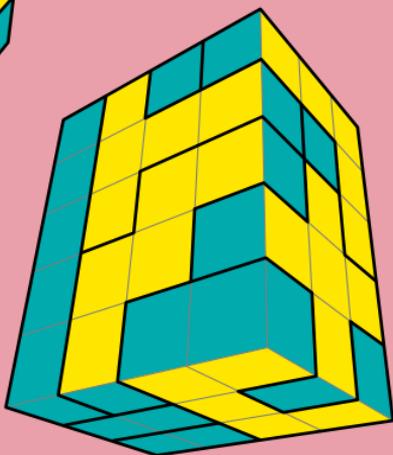
Front Bottom



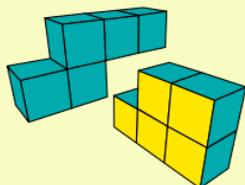
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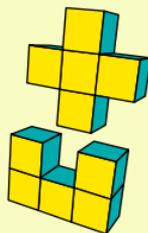
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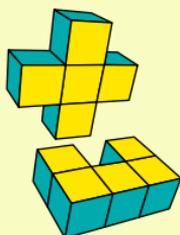
Solutions:



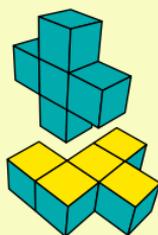
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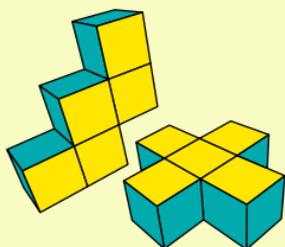
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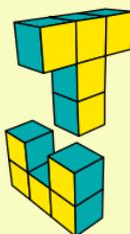
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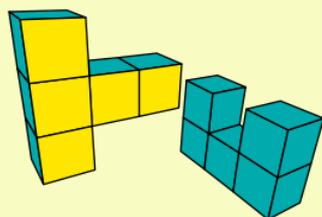
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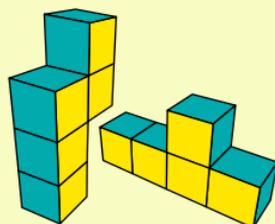
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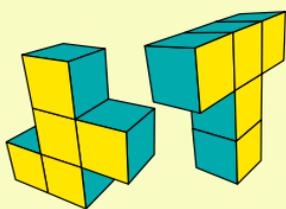


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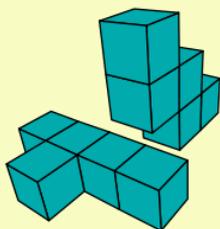


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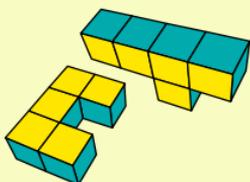




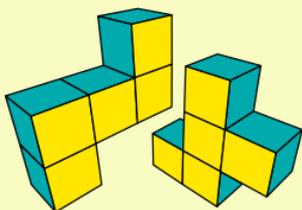
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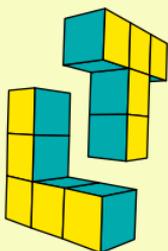
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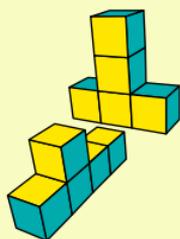
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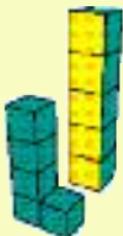
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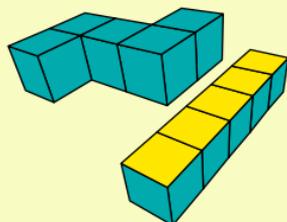
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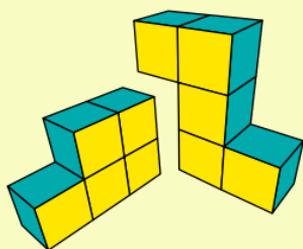
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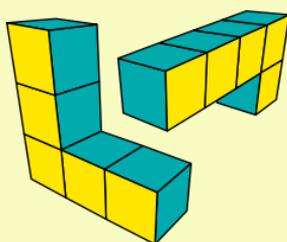
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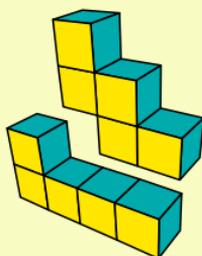
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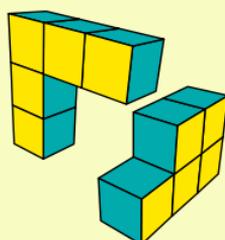
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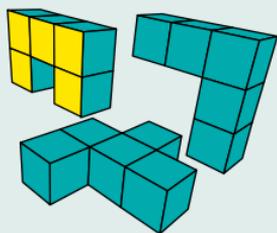
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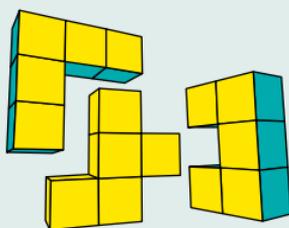
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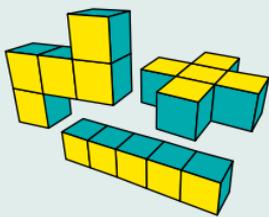


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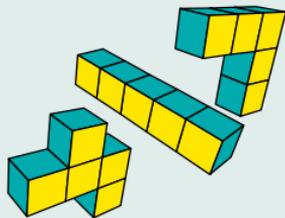


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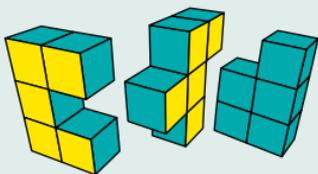




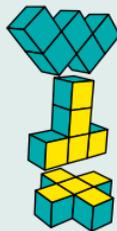
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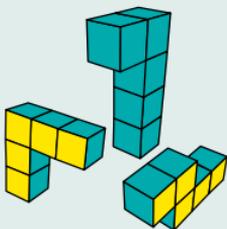
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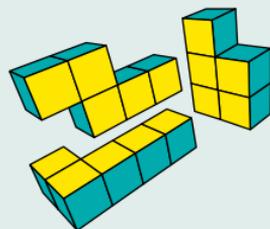
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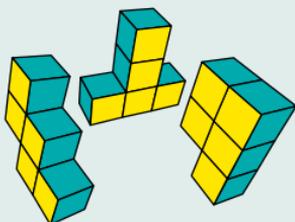
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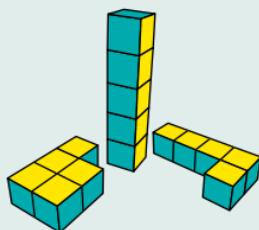
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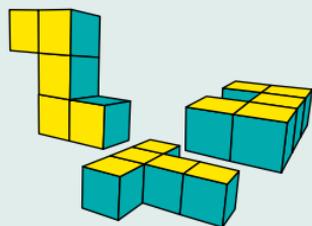
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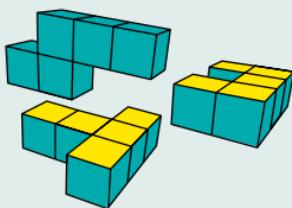
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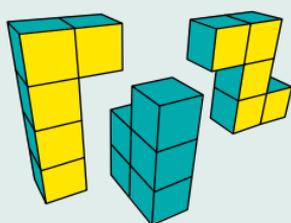
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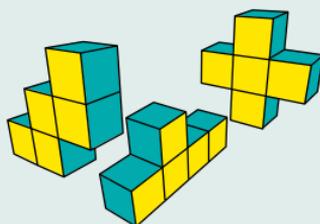
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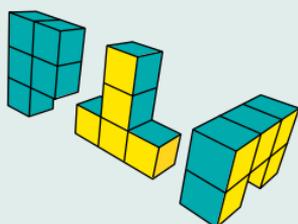
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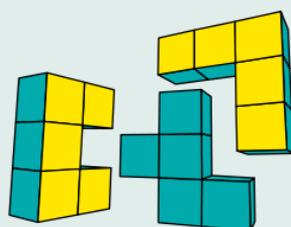
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2.14

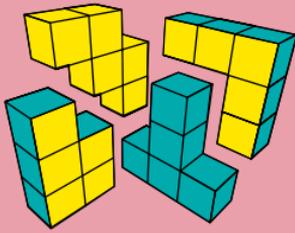


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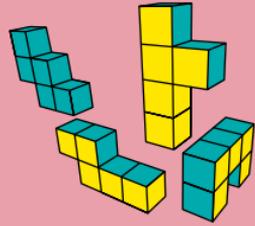


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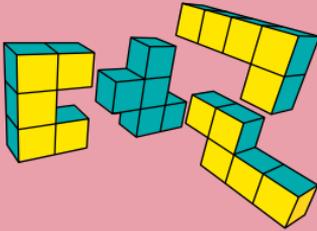




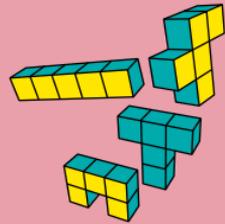
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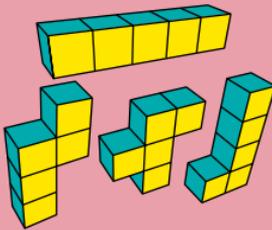
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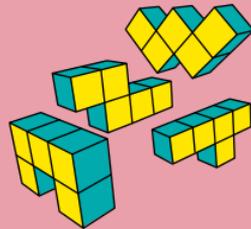
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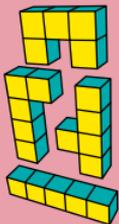
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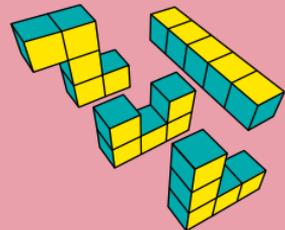
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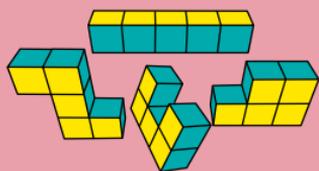
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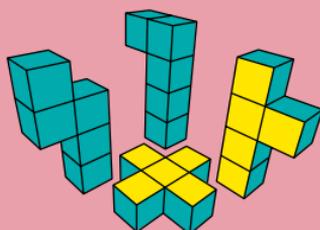
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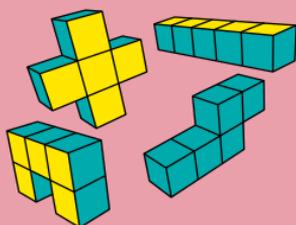
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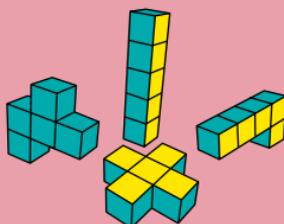
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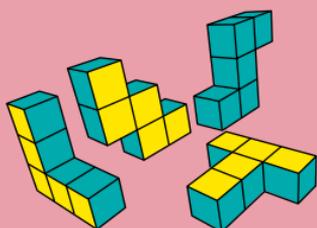
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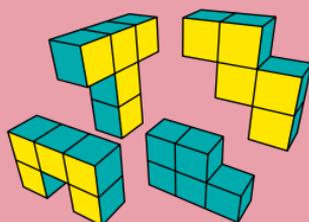
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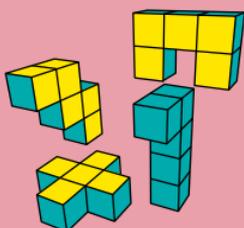
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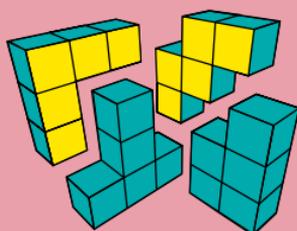
3.13



3.14



3.15



3.16



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