# **Twisted Tower**

This puzzle consists of the following layers:

- A large circular grid with a hole in the centre (the tower garden).
- Six rectangular grids, each on the outside of a cylinder, i.e. the short sides are connected to each other (the floors).
- A small circular grid (the observation deck).

These layers are assembled into a tower by stacking the six floors in the centre of the tower garden and placing the observation deck on top. The order of the floors, the relative rotation of consecutive layers, as well as which side of each floor is up, are all for the solver to determine.

On the assembled tower, draw a path from the entrance at the edge of the tower garden to the centre of the observation deck, which follows the rules of each grid it passes through. The path generally travels between the centres of cells which share an edge. The only exception is the observation deck, where the path travels along grid edges (therefore, the observation deck will appear to be misaligned by half a cell with the layer below). The path cannot cross itself or otherwise revisit a cell (or vertex), unless a layer's rules explicitly allow this.

Once the path visits layer N for the first time, it can no longer return to layer N-2 (this includes the tower garden and observation deck).

The individual layers obey the following rules:

# Tower garden: Remaze

The path visits every circle. At each circle (and only there) a single dead end branches off from the main path. The branches cannot leave this layer. The endpoints of all branches are marked with an X. Each cell is used either by the main path or by one of the branches.

### Kaisu

The path visits every cell. The path's Nth visit to a region must pass through exactly 0 or N circles.

# Meandering Words (Visits)

The path cannot visit cells with black squares. Write a letter into each cell visited by the path. Identical letters cannot appear in diagonally or orthogonally adjacent cells. When reading the letters (forward) along the path, each visit to this floor spells out one word from the given list, such that each word is used exactly once. Some letters are given (and must be visited). Given M and W must be rotated correctly in the solution.

# Elbschiffer

The path visits every circle. It turns right on circles containing X and left on circles containing +. Not all possible circles are given.

#### Icebarn

The path may intersect itself on ice. The path cannot turn on ice. The path visits every patch of ice at least once. The path passes through each arrow in the indicated direction. (*Note:* as opposed to the example puzzle, there may be unvisited cells, both ice and regular cells. It is sufficient for one cell per connected ice patch to be visited.)

### Silo

Each visit to this floor is split into sections of exactly four cells, forming tetrominoes. The path passes through every letter, indicating the shape of the tetromino covering this cell. During a single visit, tetrominoes

cannot repeat, treating rotations and reflections as the same. (**Note:** as opposed to the example puzzle, there may be tetrominoes not passing through any clue.)

### **Oriental House**

The path passes through every cell. When the path passes through an arrow, the current visit to its region must have entered and/or must exit the region in the indicated direction.

### Observation deck: Irregular Slitherlink

**The path travels along gridlines.** Numbers indicate how many of the gridline segments around the clue are used by the path. (*Note:* not all cells have the same number of gridline segments around them.)

Many thanks to the test solvers (Walker Anderson, William Hu, Kays Ishaq, Wessel Strijkstra, Kevin Sun & friends, Yuan Yao & friends) and proofreaders of the German rules (Martin Merker, Marco Wahnschafft). The following pages contain the example puzzle. For the example solution, the cylinders have been stacked on top of each other and duplicated once horizontally to reduce the number of times the path wraps around the left and right edges (to make it easier to follow the path visually). This results in a second copy of the path, which has been drawn in grey. The tower garden and observation deck solutions are shown on a separate page.

The example solution contains some additional notation to clarify the rules:

- Remaze: walls along all edges that the path and branches do not pass through (walls are the standard presentation of this genre).
- Remaze: different colours for the main path and branches.
- Silo: coloured cells indicate the different tetrominoes.

#### Kaisu



# Elbschifferpfad



# Silo

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# Turmgarten



# Wortschlangenpfad



# Eisbahn



# Oriental House



# Aussichtsplattform



Die Wortschlangen:

- 7 GHENJEI
- 7 ORTHANC
- 8 URITHIRU







The following pages contain the actual puzzle. The first page has the tower garden, observation deck, and the word list for Meandering Words. After that, there are two different versions of the cylinder grids:

- The first version just contains each cylinder grid once. You can either paste these on physical cylinders (they should fit on cylinders with a height of 5.5cm and a diameter of 7cm) or just glue together the little tabs at opposite ends, though you probably won't be able to stack the paper strips that way.
- The second version is intended for solving on flat paper. Each cylinder grid has been duplicated once. You can copy your solution over to the greyed out sides, which should make it easier to align consecutive layers and make sure all path connections are correct.



7 BABYLON
7 TORONTO
9 GUANGZHOU
11 KUALALUMPUR
11 NEWYORKCITY

**TEHRAN** 

5 TOKYO 6 MOSCOW

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- 5 PARIS
- 4 PISA5 DUBAI















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