



# WPF PUZZLE GP 2026 INSTRUCTION BOOKLET

**Host Country: Germany**

**Christian König, Martin Ender**

**Special Notes:** For this round, the phrase “valid die” means a cube where each face is labeled with a different number of pips (dots) from 1 through 6, and opposite (non-touching) faces have numbers that sum up to 7. While there are two possible arrangements of numbers (they are mirror images of each other), both arrangements satisfy the condition of being a “valid die”. If the puzzle gives pip arrangements, then the orientation of pips must match that of the die (meaning that there are 16 possible valid dice arrangements), but if the puzzle gives numbers, then the number just has to match the number of pips, in any orientation (meaning that there are only 2 possible valid dice arrangements).

The puzzles in the later half of the round have the actual grid on the surface of the cube, where the printed grid represents an unfolded cube. The corners of the cube are labeled with partial diamonds to help you visualize how the cube is to be folded; these diamonds have no special function in the puzzles. The special geometry of the cube requires appropriate changes to the rules, which are described in a paragraph that starts with the bolded word “**Cube**”. For answer submission purposes, “rows” and “left to right” should be treated on the unfolded grid as printed, not on a folded three-dimensional cube.

As an exception to the general rules of Puzzle GP, you are allowed to use scissors, tape, glue, and cubes (blank or labeled like dice) to help you solve this round, although the puzzles have been solveable by testers without any of these tools.

An earlier version of this booklet was published without point values. Other changes:

6-7 Die Roll (Pips, Ice): Clarification on “ice” cells not being reused.

18-19 Tetrominous (Cube): Puzzle title is now spelled as intended.

20-21 Star Battle (Cube): Example puzzle now shows the correct answer in the circles.

22-23 Cave (Cube): Rules have been reworded to clarify the connectivity of the area “outside the Cave”

This page: dice pip orientation rules have been made more explicit, and more permitted items have been added.

**Points:**

1.	Country Road	45	14.	Tapa (Unknowns, Cube)	24
2.	Statue Park (Subset)	48	15.	Tapa (Unknowns, Cube)	53
3.	Statue Park (Subset)	114	16.	Fillomino (Cube)	18
4.	Die Roll	13	17.	Fillomino (Cube)	49
5.	Die Roll	175	18.	Tetrominous (Cube)	16
6.	Die Roll (Pips, Ice)	34	19.	Tetrominous (Cube)	71
7.	Die Roll (Pips, Ice)	76	20.	Star Battle (Cube)	14
8.	Skyscrapers (Die Nets)	9	21.	Star Battle (Cube)	48
9.	Skyscrapers (Die Nets)	55	22.	Cave (Cube)	24
10.	Masyu (Foldable Nets)	22	23.	Cave (Cube)	58
11.	Masyu (Foldable Nets)	52	24.	Masyu (Cube)	13
12.	Fillomino (Die Nets)	21	25.	Masyu (Cube)	54
13.	Fillomino (Die Nets)	60	26.	Slitherlink (Cube)	37
			27.	Slitherlink (Cube)	48
			<b>TOTAL:</b>		1251



**6-7. Die Roll (Pips, Ice) [Martin Ender, Christian König] (34, 76 points)**

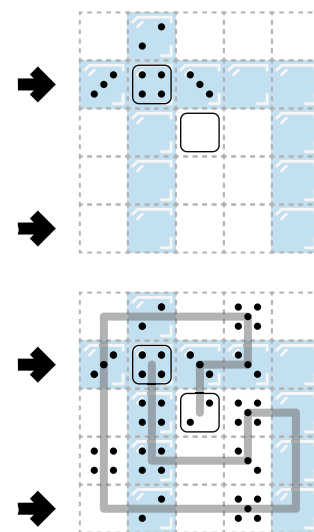
Draw a path that passes orthogonally through centers of cells. There are two cells marked with rounded squares; the path's two ends must be on those cells. The path cannot use any cell more than once (but does not have to use every cell).

Some cells are marked with pips. It must be possible to take a valid die with faces the same size as a cell, position it at one end of the path, and roll it along the path, tipping it over its edges, such that any time the die is on a space with pips, the die's top face matches those pips (with an orientation matching the pip arrangement). The path must use all cells with pips. (Note that it is sufficient to draw the path to solve the puzzle; there might be more than one way to have a valid die, such as the example solution where the 1 and 6 faces can be swapped.)

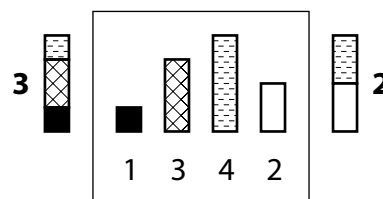
In addition, some cells are indicated as having "ice". When the die moves directly from one ice cell to another, it slides without tipping or spinning (keeping the same face on top). Ice cells, like other cells, cannot be used more than once in the path.

**Answer:** For each designated row, enter the letter for each cell, from left to right. The letter for a cell is 'I' if the path goes straight through the cell, 'L' if the path turns in the cell, and 'X' if the path does not go through the cell (including the endpoints). You may use other letters or numbers, as long as they are distinct.

**Example Answer:** IXLX, LIIIL



**Skyscrapers Clue Examples**



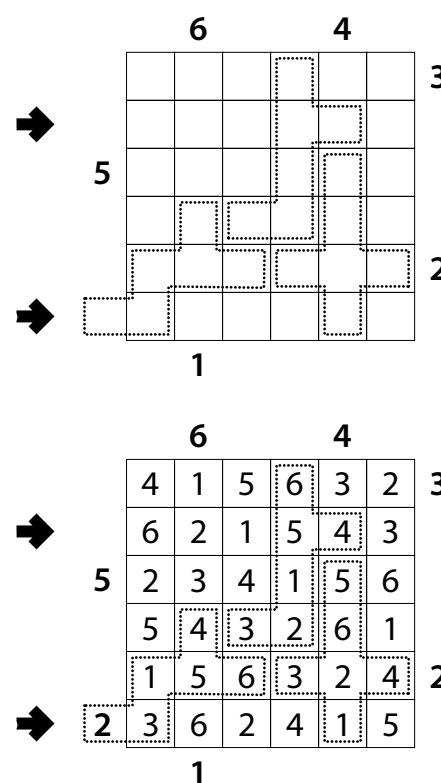
**8-9. Skyscrapers (Die Nets) [Martin Ender, Christian König] (9, 55 points)**

Place a number from 1 to X into each cell so that each number appears exactly once in each row and column. (X is the number of cells in each row.) Each number represents a skyscraper of its respective height. The numbers outside the grid indicate how many skyscrapers can be seen in the respective row or column from the respective direction; shorter skyscrapers are hidden behind taller ones. Some numbers may already be filled in for you.

Some groups of cells are indicated by a dotted "cage"; the shape of each cage can be folded up to become a valid die with the contents of the cells as faces. (If there are multiple cages, the resulting valid dice do not need to be identical in face arrangement.) Note that sections of cages that go outside the grid must be filled with valid skyscraper-counting numbers.

**Answer:** For each designated row, enter its contents from left to right. Do *not* include any numbers outside the grid.

**Example Answer:** 621543, 362415



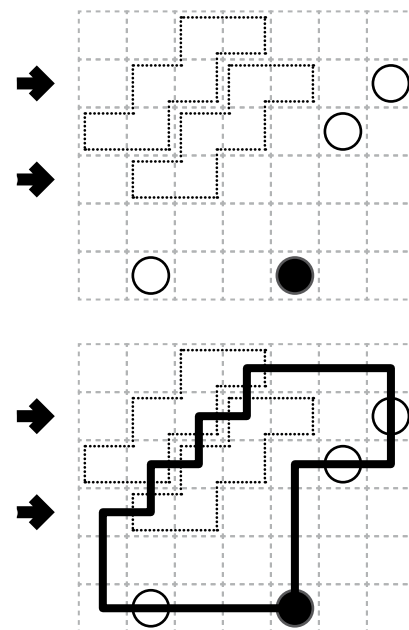
**10-11. Masyu (Foldable Nets) [Martin Ender] (22, 52 points)**

Draw a single loop that passes orthogonally through centers of cells. The loop must go through all cells with a circle. The loop cannot intersect itself or enter the same cell more than once. The loop must go straight through the cells with white circles, with a turn in at least one of the cells immediately before or after each white circle. The loop must make a turn in all the black circles, but must go straight in both cells immediately before and after each black circle.

Some groups of cells are indicated by a dotted "cage"; the shape of each cage can be folded up to become a three-dimensional object with the contents of cells as faces. There must be a way to fold each shape such that the resulting object will have exactly one loop drawn on it. (Ignore black/white circle rules when considering the loop's shape on the object.)

**Answer:** For each designated row, enter the letter for each cell, from left to right. The letter for a cell is 'I' if the loop goes straight through the cell, 'L' if the loop turns in the cell, and 'X' if the loop does not go through the cell. You may use other characters, as long as they are distinct.

**Example Answer:** XXLLXXI, LLXXIXX



**12-13. Fillomino (Die Nets) [Martin Ender, Christian König] (21, 60 points)**

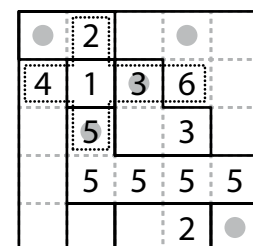
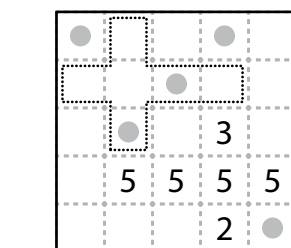
Divide the grid along the dashed lines into regions (called polyominoes) so that no two polyominoes with the same area share an edge. Inside some cells are numbers; each number must equal the area of the polyomino it belongs to. A polyomino may contain zero, one, or more of the given numbers. (It is possible to have a "hidden" polyomino: a polyomino without any of the given numbers. "Hidden" polyominoes may have any area, including a value not present in the starting grid, such as a 6 in a puzzle with only clues numbered 1-5.)

Some groups of cells are indicated by a dotted "cage"; if each cell in the cage is filled with a number that satisfies the above constraints, then the shape of each cage can be folded up to become a valid die with the contents of the cells as faces. (If there are multiple cages, the resulting valid dice do not need to be identical in face arrangement.)

*The dots in cells are only used for entering your answers.*

**Answer:** Enter the area of the polyomino each dot is in, reading the dots from left to right. (Ignore which row the dots are in.) Use only the last digit for two-digit numbers; e.g., use '0' for a polyomino of size 10.

**Example Answer:** 25361





### 14-15. Tapa (Unknowns, Cube) [Martin Ender, Christian König] (24, 53 points)

Shade some empty cells; cells with numbers cannot be shaded. All shaded cells connect along edges to create a single connected region. (It is permissible for the region to touch itself at a corner, but touching at a corner does not connect the region.) No 2x2 group of cells can be entirely shaded.

Numbers in a cell indicate the lengths of contiguous shaded cell groups along the "ring" of 8 cells touching that cell (fewer for cells along the outside edge). If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the shaded cell groups. The numbers are given in *no particular order*. As a special case, if the number given in a cell is a zero (0), it means that none of the cells around that cell can be shaded.

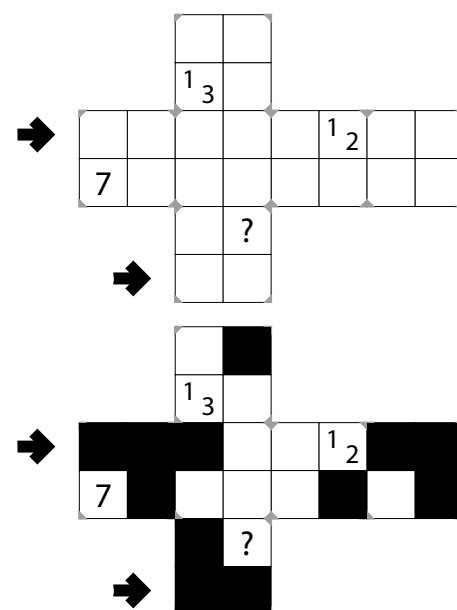
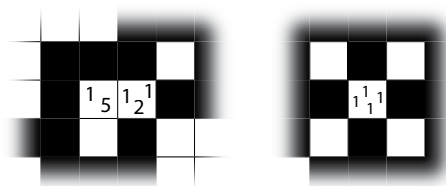
Some numbers may be replaced with question marks ('?'). Ignore the arrangement of numbers; for example, a "? 2" could be a "1 2", "2 2", "3 2", or "4 2". If there is more than one number or question mark in a cell, none of them can be zero (0).

**Cube:** Each cell touching a corner of the cube has a "ring" of 7 touching cells instead of 8, and no group of three cells touching the same corner of the cube can be entirely shaded.

**Answer:** For each designated row, enter its contents from left to right. Use 'x' for an unshaded cell and 'o' for a shaded cell. You may use two other letters or numbers, as long as they are distinct.

**Example Answer:** 000xxx00, 00

Tapa Clue Examples



### 16-17. Fillomino (Cube) [Martin Ender] (18, 49 points)

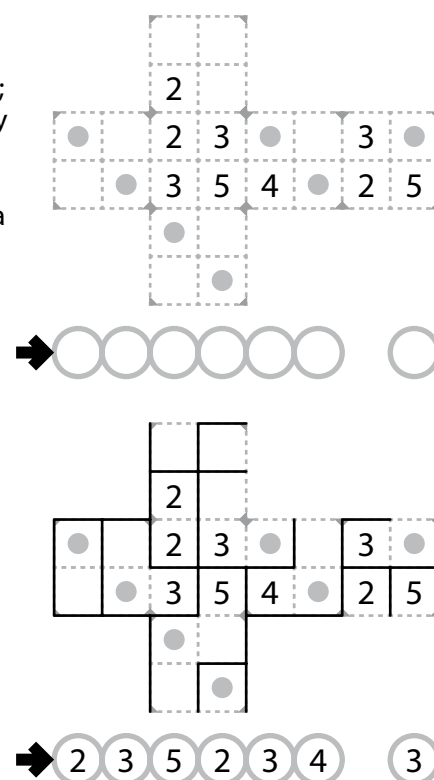
Divide the grid along the dashed lines into regions (called polyominoes) so that no two polyominoes with the same area share an edge. Inside some cells are numbers; each number must equal the area of the polyomino it belongs to. A polyomino may contain zero, one, or more of the given numbers. (It is possible to have a "hidden" polyomino: a polyomino without any of the given numbers. "Hidden" polyominoes may have any area, including a value not present in the starting grid, such as a 6 in a puzzle with only clues numbered 1-5.)

**Cube:** Regions may be folded over the edges of the cube (despite the name "polyomino" normally meaning a flat shape made out of squares). It is permissible for a region to include all three cells touching the same corner of the cube.

*The dots in cells are only used for entering your answers.*

**Answer:** Enter the area of the polyomino each dot is in, reading the dots from left to right. (Ignore which row the dots are in.) Use only the last digit for two-digit numbers; e.g., use '0' for a polyomino of size 10.

**Example Answer:** 2352343



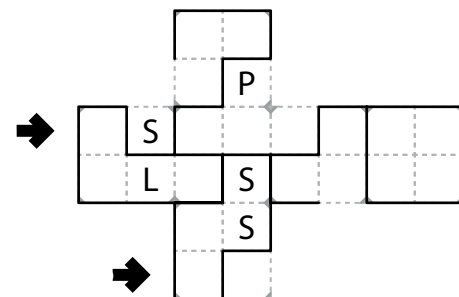
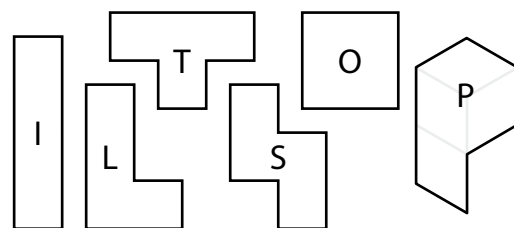
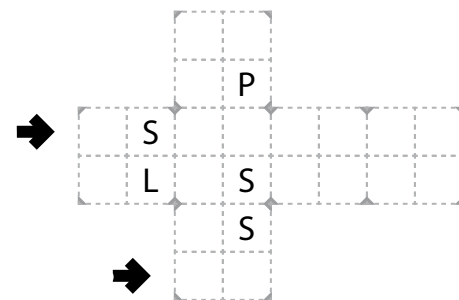
**18-19. Tetrominous (Cube) [Martin Ender] (16, 71 points)**

Divide the grid along the dashed lines into tetrominoes such that every cell in the grid is part of exactly one tetromino. Tetrominoes of the same shape (rotations and reflections of a tetromino count as the same shape) cannot touch each other along an edge (but they may touch diagonally). Some letters are given in the grid. Each letter must be part of a tetromino with that letter's shape. It is permissible for a tetromino to contain more than one letter. (It is possible for some tetromino shapes to never appear in the grid, or more than once.)

**Cube:** Regions may be folded over the edges of the cube (despite the word "tetromino" normally meaning a flat shape made out of 4 squares). It is permissible for a "tetromino" to include all three cells touching the same corner of the cube; such a shape is given the letter "P" (which is considered distinct from "L", "T", and "S" even though it could unfold to all three of those tetrominoes, depending on where it is cut).

**Answer:** For each designated row, enter the letter for the tetromino that each cell belongs to, from left to right.

**Example Answer:** LSPPTOO, ST



**20-21. Star Battle (Cube) [Christian König] (14, 48 points)**

Place stars into some cells in the grid, no more than one star per cell. Each row and each outlined region must contain exactly the same number of stars; that number of stars is shown outside the upper-right of the grid. Cells with stars cannot touch each other along an edge or a corner.

**Cube:** Instead of flat rows and columns, each "row" is a ring of touching cells that goes across four faces of the cube, connecting cells by opposite edges of that cell.

*The numbers on top of the diagram are for Answer purposes only.*

**Answer:** For each row from top to bottom, enter the number of the first column from the left where a star appears (the number on top of that column). (Note that not all rows will start in column 1.) Use only the last digit for two-digit numbers; e.g., use '0' if the first star appears in column 10.

**Example Answer:** 008204

