

## **Fractal Puzzle Help Index**

### **How to Play**

[Playing the Game](#)  
[Strategy and Hints](#)

### **Commands**

[Game Menu Commands](#)

## How To Play

The following topics explain how to play Fractal Puzzle:

[Playing the Game](#)  
[Strategy and Hints](#)

## Game Menu Commands

### Scramble

Randomly scrambles the tiles, and removes one tile so that you can slid the tiles to rearrange them. You can issue this command more than once, if you want to do a more thorough job of scrambling. You cannot choose this command until you have selected one of the games (by choosing one of the **Game 1 ... Game 4** commands). **Note:** If you issue this command after arranging tiles, your work will be undone!

### Game 1 ... Game 4

Starts a new game. Each of these four commands displays a different fractal pattern. Initially, the tiles are ordered correctly; to begin playing, you must choose the **Scramble** command to scramble the tiles and remove one of them.

### Exit

Terminates the Fractal Puzzle program.

## Playing the Game

When you run Fractal Puzzle, a form appears containing 16 blank tiles. To begin playing, you must choose one of the four Puzzle commands (Puzzle 1, Puzzle 2, Puzzle 3, or Puzzle 4) from the Game menu. Each of these commands draws a different fractal pattern on the tiles.

After you have chosen a Puzzle command and have observed the fractal pattern, choose the Scramble command from the Game menu. The program removes one of the tiles (the specific tile is selected randomly) and randomly rearranges the remaining 15 tiles.

**Note:** You can choose the Scramble command more than once if you want to scramble the tiles more thoroughly. If, however, you choose Scramble after arranging the tiles, your work will be lost!

You can move any of the tiles that adjoin the empty space. To move one of these tiles into the empty space, simply click on it.

The object of the game is to continue moving tiles until you have formed the fractal pattern that was displayed before the tiles were scrambled. Remember, however, that one tile will be missing from the original pattern because a tile was removed when you first chose the Scramble command.

**Note:** In the traditional hand-held puzzle, the missing tile is always the one that is located at the lower right corner of the solved puzzle. In Fractal Puzzle, however, the missing tile can be at *any* position within the solved puzzle.

When you finally solve the puzzle, the program beeps and restores the missing tile, so you can again see the complete fractal pattern. You can now choose the Scramble command to play a new game using the same pattern, or you can choose another Puzzle command to play a game using a different pattern. When you open the Game menu, the Puzzle command you chose previously (if any) is checked.


If, while you are solving a puzzle, you give up and want to see the solution, you can simply choose the same Puzzle command that you chose to start the game (that is, the checked one).

## Strategy and Hints

Before you scramble the tiles, study the fractal pattern for a while because you will not be able to refer to it after scrambling. Alternatively, you can press the Alt-PrintScreen key combination to copy the form to the Clipboard and then use the Windows Clipboard program to view the pattern while solving the puzzle. (This should not be construed as cheating; recall that while working on a jigsaw puzzle, you are always allowed to look at the picture on the lid.)

While you are moving the tiles, keep in mind that all the fractal patterns are symmetric; the part of the pattern that you have already completed can reveal the way to complete the part you are currently solving.

The following steps provide a systematic method for solving the puzzle efficiently. Refer to the figure below for the numbering of the tile positions and rows:



Fractal Puzzle					
	Game	Help			
row 1	1	2	3	4	5
row 2	6	7	8	9	10
row 3	11	12	13	14	15
row 4	16	17	18	19	20
row 5	21	22	23	24	25

1. Place the correct tiles in positions 1 through 4. In this step, you should proceed from left to right, and after you have positioned a tile correctly, you should not move it while positioning subsequent tiles.
2. Place the correct tile in position 5. To do this, you will have to temporarily move the tile in position 4.
3. Position the tiles in the second row, proceeding as in steps 1 and 2, without disturbing the tiles in the first row.
4. Continue using this procedure for the following rows, until you reach a position for which you cannot find a tile. (Recall that the missing tile occurs in a randomly chosen position.) You should then abandon the current row, begin positioning tiles in the last row, and proceed row by row back toward the missing tile (row 5, then row 4, and so on).
5. When you have completed all rows except two, proceed column by column rather than row by row, without disturbing tiles outside these last two rows. Start by placing the two tiles in the left column, and move right until you encounter the missing tile; then start from the right column and move left. When you reach the missing tile, the puzzle will be solved.

For example, consider a game in which the missing tile is at position 13. You would place tiles first in row 1 and then in row 2. When placing tiles in row 3, however, you would encounter the missing tile; you would therefore abandon this row and begin placing tiles in row 5. After completing row 5, only two rows

would be left; you would therefore place tiles in positions 11 and 16, then 12 and 17, then 15 and 20, and finally 14 and 19. The puzzle would then be solved.