

















7 STEP SOLUTION
GUIDE

For 1 Player AGES 8 to Adult

# **About your Rubik's Cube**

RUBIK'S Cube is just one of a series of exciting puzzles designed to challenge your mind and capture your imagination. With amazing movement of color and pieces, each puzzle offers an intricate challenge that is hard to put down. And just in case it has you stumped, this 7-Step Solution Guide will help you master the challenge.

RUBIK Fact: RUBIK'S Cube was invented by Erno Rubik, a Hungarian Professor of Architecture and Design. Within one year of its launch in 1980, it became the fastest-selling puzzle the world has ever known. Rubik's Cube is now the best-selling puzzle ever, with over 250 million cubes sold.

RUBIK Fact: Most cubes can be solved in only 17 moves with the aid of a computer, and theoretically there is no cube that requires more than 20 twists to solve. Some people can solve the cube in under 45 moves from any scrambled position; and a few can even solve the cube blindfolded!

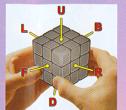
# The 7-Step Solution Guide

Each step involves a sequence of twists of the cube to move a particular square. To solve the cube, just repeat the steps!

Each face of the cube is assigned a letter (shown below). Each step is made up of a sequence of twists (a one quarter-turn of the face of the cube). To complete the sequence for each step, twist one face of the cube, then twist the next face, and so on, for the complete sequence. The letter 'i' means inverse, or counterclockwise. Before you start each move, be sure to place your thumbs on the F side of the cube, as shown in the illustration. This will ensure that your cube is properly oriented to execute the move.

#### Turn clockwise

- R Right Face
- L Left Face
- B Back Face
- D Down Face
- F Front Face
- U Upper Face
- ?i Inverse Iturn Counter-clockwise)



Important! To turn a face clockwise, imagine you are facing that side of the cube

# How each step works

R \_ Twist the Back Face a quarter turn clockwise Ri - Twist the Right Face a quarter-turn counter-clockwise



Example



Each step can be used to solve up to FOUR pieces if there are none solved when you start the step. Please note that these illustrations display a sample of a situation on your cube for ONE of the possible FOUR pieces needing to be solved. In many cases, you will need to rotate the cube to a new starting face (with red, orange, yellow or white center square) and repeat the instructions in order to place/rotate all of the pieces in that step before moving on. The end result will only come AFTER all four sides of the cube have been through that step's sequence and all the pieces are in their proper location and oriented properly to match the surrounding center square colors. As such, you may have to repeat the same step a few times with different sides as the starting face until all the pieces are solved.

#### Step 1 - Solve the Upper Green Cross

HINT: To solve the green cross, you have to solve each green edge piece on your own, one-by-one. The tricky part is not messing up the ones you've already solved. First solve the red-green edge, then the white-green edge, then the orange-green edge, then the bluegreen edge. You have to figure this part out for yourself. Should you ever have an edge piece in the correct place but flipped the wrong way, use this step to flip it without affecting the other three green edges. Just hold the cube with the piece in the upper-right position as in the picture below, and do the sequence Ri U Fi Ui. The edge piece will now be solved, and you can work on the next edge piece.





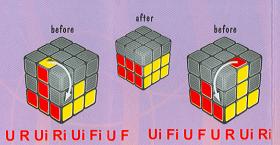
#### Step 2 - Solve the Green Corners

HINT: Find a corner piece in the bottom layer that belongs on top. Turn the bottom layer until that piece is directly below its home in the top layer. Hold the cube with the piece at the lower-front-right and its home at the upper-front-right, as in the picture, and then do the sequence Ri Di R D 1, 3, or 5 times until that corner is solved. If you find a corner piece that's already in the top layer but it's in the wrong spot or flipped the wrong way, just hold the cube with that piece in the upper front right position, and do Ri Di R D once. Now the piece is in the bottom layer, and you can solve it as described above.



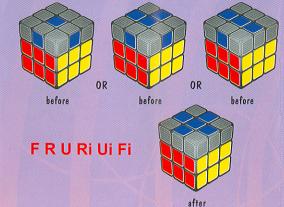
#### Step 3 - Solve the Middle Layer Edges

HINT: Now flip the cube over so green is on the bottom. Try to find the red-yellow edge piece. If it's in the top layer, turn it until the edge matches one of the pictures below. Then do the corresponding sequence to solve it. If the red-yellow edge piece is somewhere in the middle layer, but it's in the wrong place or flipped the wrong way, hold the cube so that the red-yellow edge is in the front-right position, and do either sequence once. (This may require you to rotate the cube to a new face). After the move, the piece is in the top layer, and you can solve it as described above. Repeat this for the other 3 middle-layer edges.



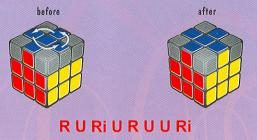
### Step 4 - Solve the Upper Blue Cross

HINT: Turn the top layer until the edges match one of these pictures. If you do the sequence below once and you still don't have a blue cross, then repeat this step until you do. It doesn't matter which face you start with. Note: In this step, there will be other blue pieces showing on your cube that do not appear in these diagrams.



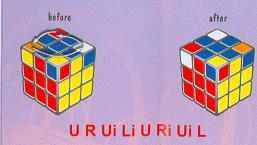
#### Step 5 - Solve the Top Edges

HINT: Hold the cube with red in front. Turn the top layer until the red and blue edge piece is solved as in the picture, and then repeat the sequence below until the yellow and blue edge piece is also solved, on the right side. Now turn the whole cube so that white is the "Front" face. If the top white edge isn't solved, just do the sequence once more, followed by "U" to position all the edges properly.



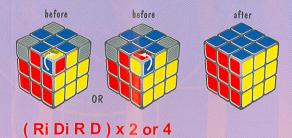
## Step 6 - Solve the Top Corners

HINT: Find a corner piece that's in the right place, and hold the cube with that piece above your right thumb. In the picture, this piece is the blue, yellow, and red piece. Don't turn the top layer at all, because you will mess up the edges that you just solved in step 5. Now do the sequence below once or twice to put the other 3 corners into the right places. If you can't find a corner piece in the right place, just do the sequence below once before you start this step.



# Step 7 - Solve the Top Corners

HINT: Hold the cube with red in front. Keep turning the top layer until the upper-front-right corner needs to be flipped, to have blue on top, like in the picture. Do the sequence below either 2 or 4 times to flip the corner so that blue is on top. Note: As you work through this step, lower layer colors may become scrambled. Don't worry, just keep going! With red still in front, keep turning the top layer and do the sequence again whenever needed to flip the upper-front-right corner piece. When all the corners have been flipped, just turn the layer to solve the cube. Congratulations, you've done it!



#### www.rubiks.com

The Rubik Internet Website is an international meeting point for both Rubik's enthusiasts and casual puzzlers. It is one of the best designed free entertainment pages on the Internet. There are puzzles, competitions, free downloads, hints, solutions and bulletin boards. The Website is regularly updated with fresh puzzles and competitions. www.rubiks.com is designed to be fast and fun, so go for it, log on now.

www.rubikshop.com is also available to purchase Rubik products online with many exclusive items, one of which is Dan Knights' first video in the series to learn how to solve the cube in under a minute! There is also the Virtual Cube Solver which will give a step-by-step solution movie personalized to your own scrambled cube! Check out all the latest puzzles from Rubik at: www.rubikshop.com



#### Billions of Combinations, One Solution!

RUBIK'S® Cube is the incredibly addictive, multi-dimensional challenge that has fascinated puzzle fans around the world. Over 250 million cubes have been sold and at least one in every five people in the world has twisted, jumbled and enjoyed this immensely popular puzzle.

RUBIK'S® Cube has been called "the perfect puzzle" and "the best puzzle ever." With a few turns, you mix up its small colored cubes. Now match the cubes back up again to make every side a solid color. You can solve RUBIK'S Cube from any starting point and from any topsy-turvy arrangement of colors. With the right twists, anybody can do it, and with 43 quintillion [43,252,003,274,489,856,000] combinations, no challenge is ever the same!

RUBIK's Facts:
22.95 seconds! That's how long a high school student from Los
Angeles took to unscramble the cube and win the Budapest world
championship in 1982.

Dan Knights from the USA won the 2003 Rubik's Games Championship held in Toronto, Canada. His average time was just 20 seconds.

RUBIK'S® Cube is the world's #1 selling puzzle. The Original Cube is part of an exciting series of puzzles designed to challenge your mind and capture your imagination. Twist and turn the colors & pieces and you'll find an intricate challenge that you won't want to put down. And just in case you get stumped, each puzzle comes with a Solution Hints Booklet to help you find the brain teasing solution!

RUBIK'S® 4x4 Your favorite Rubik's Cube has gotten bigger!
Building on design, this super model is 4x4! Truly for the Rubik's
aficionado. Can you handle it? Comes with a Solution Hints
Booklet.

RUBIK'S® Checkers Challenge Rubik's isn't just about puzzles, it's also about great games. The time honored favorite of checkers has been upgraded to become Rubik's Checkers! All pieces start as kings, but, can you keep them that way? Complete with 16 2-sided pieces and its own carrying case.

RUBIK'S® Simpsons<sup>TM</sup> Puzzle—Homer The world's most challenging puzzle meets the world's most challenged man. It's a combination of two famous icons. Can you solve the RUBIK'S®—Simpsons challenge?

RUBIK'S® Cube UFO Leave it to Rubik's to make a UFO shaped puzzle. Solve it by aligning all the colors. It sounds a lot easier than it really is. Comes with a Solution Hints Booklet.



We will be happy to hear your questions or comments about this game. Write to: Hasbro Games, Consume Affairs Dept., P.O. Box 200, Pawtwoket, RI 02862, Tel: 888-836-7025 (tol. free). Conadian consumers please write to: Hasbro Canada Carporation, 2350 de la Province, Longqueii, QC Canada, J46 (162.

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