

RUBIK'S CUBE **SOLVE GUIDE**

8 Steps to a Solved Cube





Step 1
THE DAISY



Step 2
THE WHITE CROSS



Step 3
THE WHITE CORNERS



Step 4
THE MIDDLE LAYER



Step 5
THE YELLOW CROSS



Step 6
THE YELLOW FACE



Step 7
THE YELLOW CORNERS



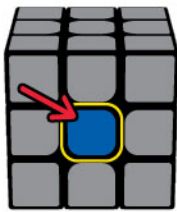
Step 8
THE YELLOW EDGES

THE BASICS

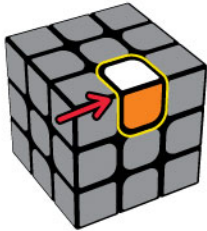
GET TO KNOW YOUR CUBE

Start by thinking of your Cube as **pieces that rotate and move around the CENTER** rather than colored stickers. Notice how all but the CENTER pieces contain multiple colors that always move together.

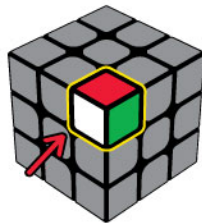
The Three Types of Pieces



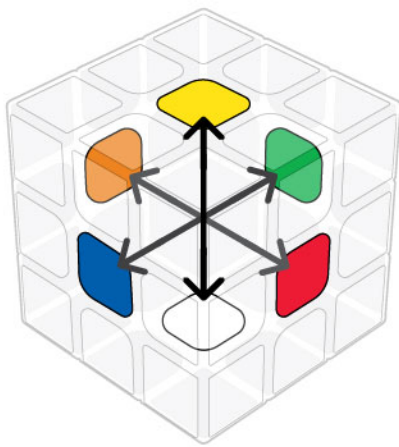
CENTER PIECES
1 Colored Tile



EDGE PIECES
2 Colored Tiles



CORNER PIECES
3 Colored Tiles

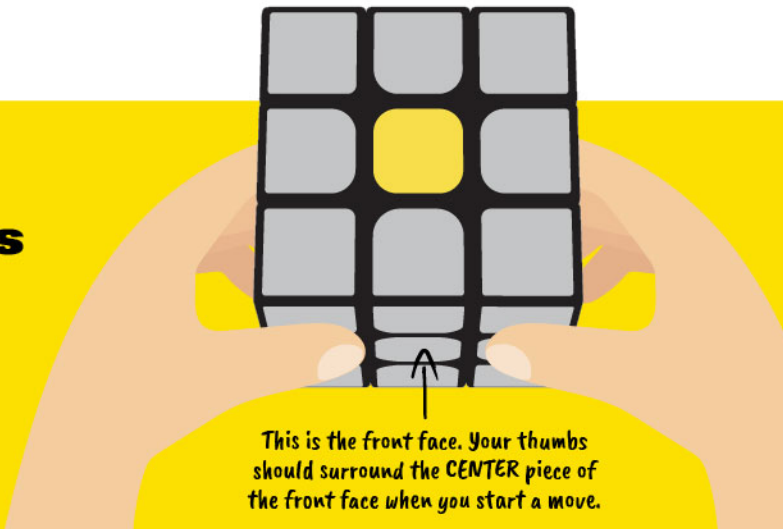


The color of each side of the Cube is determined by its CENTER piece. As you move the sides of your Cube, notice that the CENTER pieces never move, and always maintain the same relationship to one another. For instance, the white side will always be opposite to yellow, blue opposite to green, and red opposite to the orange side.

Just like a jigsaw puzzle, every piece has precisely one place it must go to solve the Cube. In order to be in the correct place, every tile must match the color of its CENTER piece.

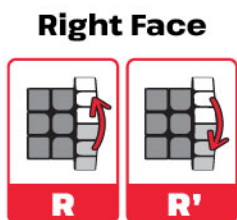
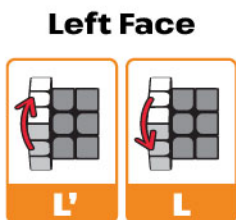
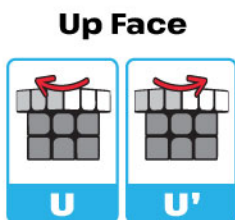
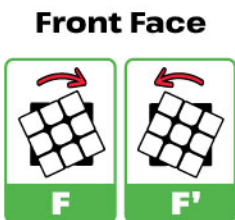
For every step in this guide:
The yellow CENTER will always be at the top of your Cube.

It's important to keep your Cube properly oriented. This will reduce confusion and keep you from undoing the work you've already done as you go.



THE MOVES

If just the letter (**F**), move it clockwise. If the letter and prime (**F'**), move it counter-clockwise.

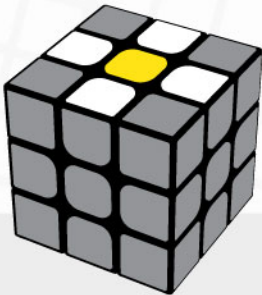


Each move is a quarter turn (90°). If you see a **2** (Example: F2) give it two quarter turns (180°).

Step 1

THE DAISY

Goal for this step:



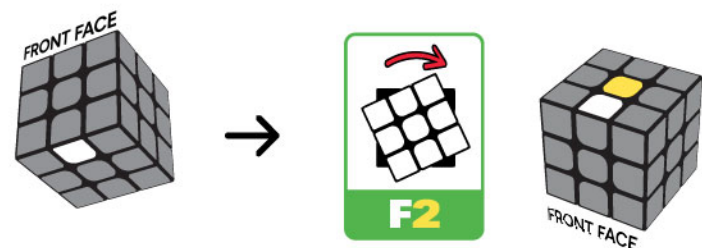
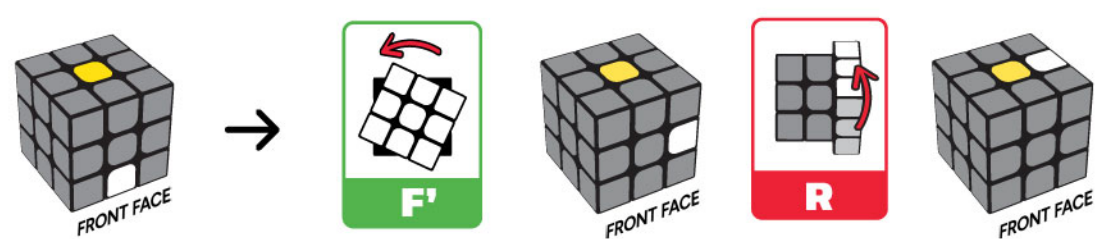
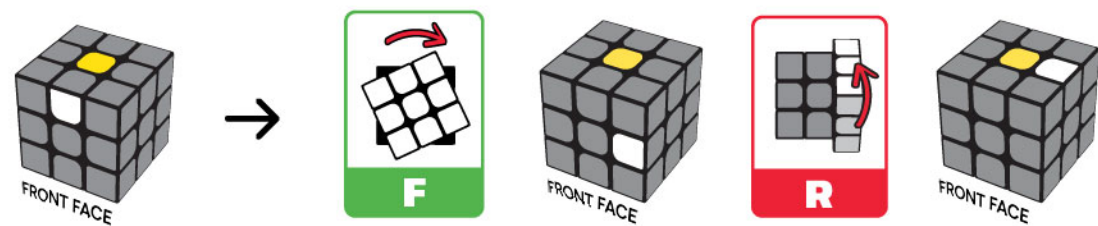
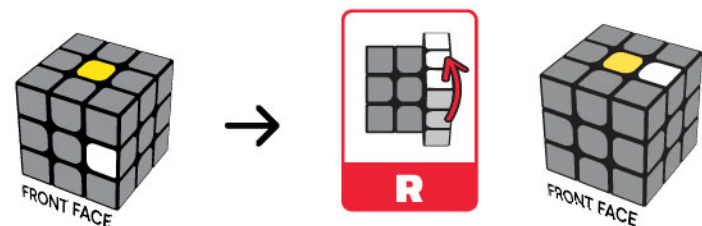
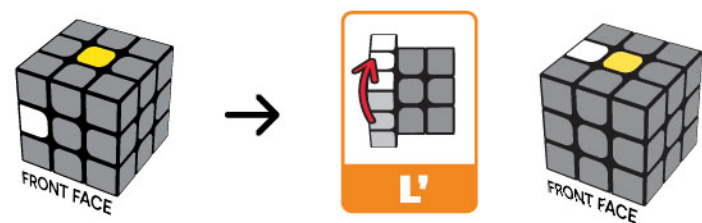
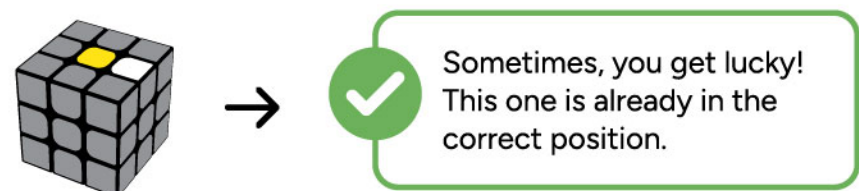
WHAT YOU'RE DOING

Build a White Daisy around the Yellow CENTER.

Find the white EDGE pieces and follow the steps below to bring them to the top. Once you place a white EDGE on the top face, be mindful not to remove it as you place others.

HOW TO DO IT

Locate a white EDGE and find the corresponding example below, then follow the steps to bring it to the UP face. Continue with these steps until all of your white EDGES are surrounding the yellow CENTER.



DON'T FORGET!
2 means two quarter turns.

SOLVING NOTE

Notice that as you place the white EDGES, you may need to rotate the UP face on top of the Cube to make space to slide another white EDGE in around the yellow CENTER.

EXAMPLE:



YOU DID IT!

Step 1 is Complete

If you mess up and need to go back, don't get discouraged. Think of every mistake as an opportunity to practice what you've already learned.



Step 2

THE WHITE CROSS

Goal for this step:



WHAT YOU'RE DOING

Continuing with the yellow face on top, move all of the white EDGE pieces to the white face. To do so, match the white EDGE piece's adjoining tile to its CENTER piece, then rotate it to the bottom

HOW TO DO IT

Match one of the EDGES to its CENTER by rotating the UP face. Then rotate the front face twice to join the white EDGE with the white CENTER.



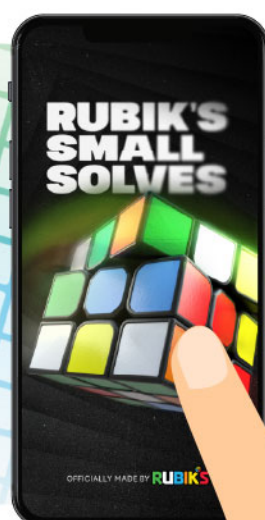
Repeat this with all four white EDGE pieces until you've formed the white cross on the bottom layer.



HAVING ANY TROUBLE?

Download the Rubik's Small Solves App for interactive assistance on your solve journey.

Visit www.rubiks.com for more.



YOU GOT THIS!

Step 2 is Complete
Keep going!



Step 3

THE WHITE CORNERS

Goal for this step:



WHAT YOU'RE DOING

Locate the white CORNER pieces, then move them to the white face on the bottom, so that the two other adjoining tiles on each CORNER piece are correctly placed with their matching face.

HOW TO DO IT

Using Trigger moves, you'll orient the white CORNERS and move them to the bottom face. To do so, find the white CORNER below that matches what you have and follow the steps to place it. As you go, be careful to not lose your white cross and the CORNERS you've already placed.

But first, we'll learn Triggers.

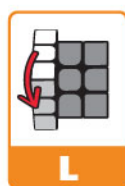
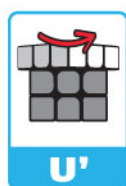
SOLVING NOTE ★

To adjust a white CORNER:

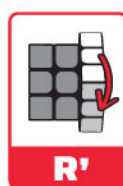
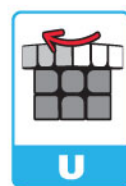
Move a white CORNER above the empty bottom CORNER you want to place it into. This avoids disrupting the CORNERS you've already placed.

TRIGGERS

Time to learn your first move patterns. Practice these moves because this won't be the last step that uses them.



THE LEFT TRIGGER

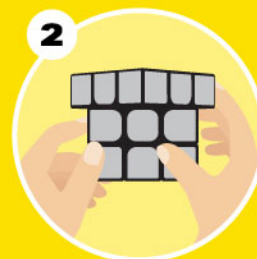
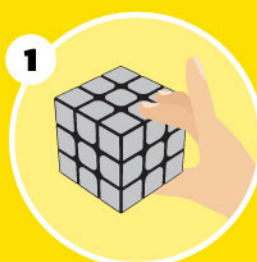


THE RIGHT TRIGGER

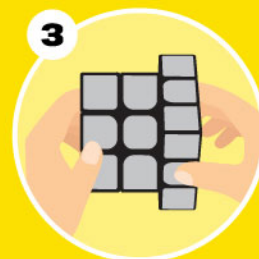
SOLVING NOTE ★

When performing a Trigger move, place the thumb that matches the move you're making, Left or Right, on the middle tile of that side's bottom face. Then place your middle and ring fingers on the furthest two tiles of the top layer in order to start the first move.

After the first move, use your index finger to rotate the top layer. Then, rotate that same hand back to how it was at the start.

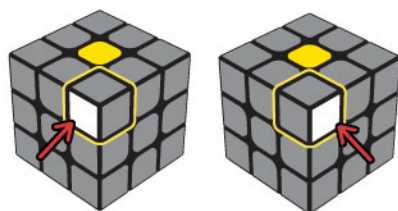


These examples show a Right Trigger. Do the same with your left hand to perform a Left Trigger.



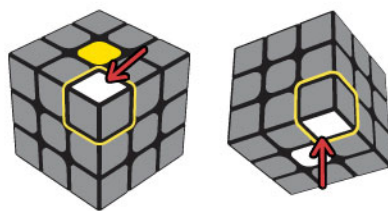
Positions You'll Find Your White CORNER Pieces

On the top layer with the white tile facing out



THIS is ideal!

On the top layer with the white tile facing up, or in any position in the bottom layer



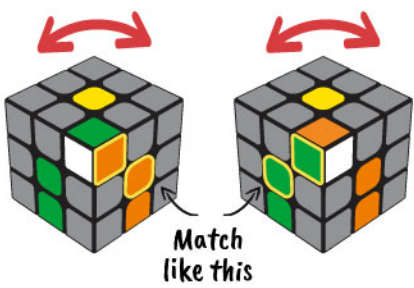
You'll learn how to get these corners to look like those.

Step 3 THE WHITE CORNERS

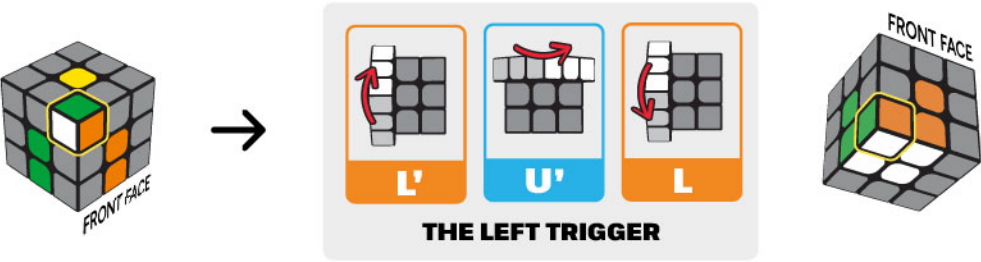
Let's start with the white CORNERs on the top layer with the white tile facing out.

Turn the UP face to align the non-white tile (that isn't facing up) with the same colored CENTER piece. Notice how in the example the orange is on the same face as the orange CENTER tile, and the same is true of the green example beside it.

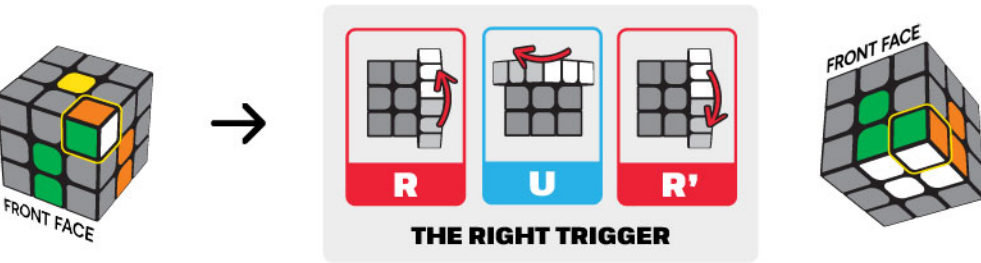
Rotate the UP Face so the tile matches with the color of the CENTER.



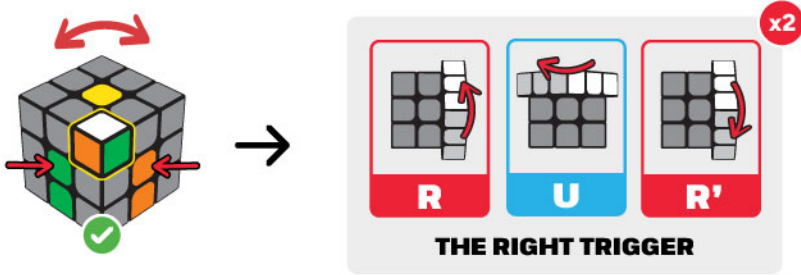
When the tile matching the face is on the **top left** of the front face, **perform a Left Trigger**.



When the tile matching the face is on the **top right** of the front face, **perform a Right Trigger**.

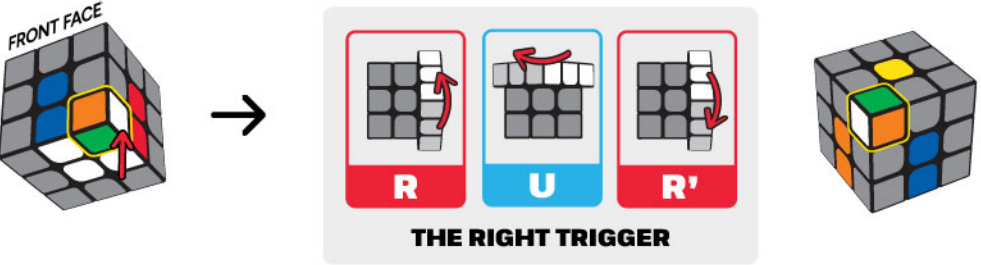


If the white tile is facing up, place it in the top CORNER between the two color faces shown on the corner piece. Then perform the Right Trigger twice to flip the white CORNER to the outside.



Now, your CORNER piece should look like the examples above. Determine if you need a Left or Right Trigger to slide the CORNER to the bottom layer.

If the white CORNER is facing any direction in the bottom layer, perform a Right Trigger with that piece on the bottom right of the front face. Then check where that CORNER is and do the relevant move from above now that you have the white CORNER in the top layer.



Check the CORNER position and go to the move above that shows what you see on your Cube.

Repeat the above moves until all four white CORNERs are located in their correct positions between their CENTER pieces in the bottom layer.



Step 4

THE MIDDLE LAYER

Goal for this step:

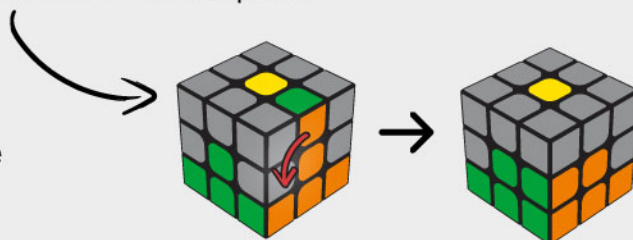


WHAT YOU'RE DOING

You're going to look for **EDGE** pieces that don't have a yellow tile. Then, move them into position between the **CENTER** pieces matching the colors on that **EDGE** piece.

HOW TO DO IT

Line up your **EDGE** piece so that the tile on the front face matches the **CENTER** piece. Then, determine if you'll be moving that piece left or right, and perform the moves to place that **EDGE** piece in the middle layer.

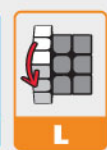
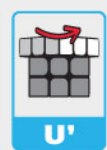


Locate one of your non-yellow EDGE pieces and determine which way it needs to move to be in the correct position.



MOVE LEFT:

The **EDGE** piece is moving down to the left of the **CENTER** piece

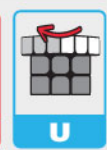


THE LEFT TRIGGER



MOVE RIGHT:

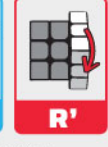
The **EDGE** piece is moving down to the right of the **CENTER** piece



THE RIGHT TRIGGER

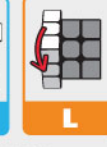
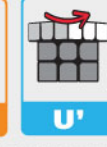


Now, your white **CORNER** piece is in the top layer again like in Step 3. Rotate the top layer so that the **CORNER** matches its **CENTER**, and perform a **Trigger** to move the **CORNER** back to the bottom layer. **It should go like this:**



THE RIGHT TRIGGER

You'll see the white tile on the **CORNER** facing out. Turning the **UP** layer will line the **CORNER** up with the **CENTER**, like in Step 3.



THE LEFT TRIGGER

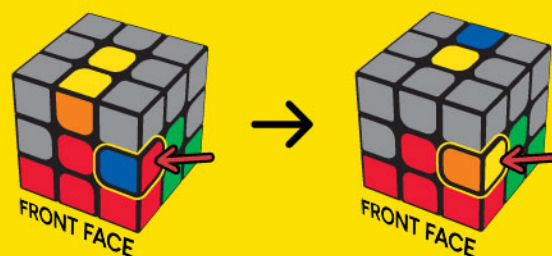
Notice that the front face changes after moving the **UP** face!

Repeat this with each non-yellow **EDGE** piece until you've completed the middle layer.

SOLVING NOTE ★

Can't find any non-yellow EDGE pieces on the UP face but your middle layer isn't complete?

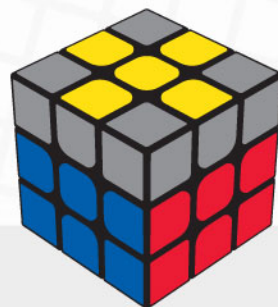
Move a yellow **EDGE** piece above a **CENTER** piece in order to swap it with an **EDGE** piece that you need. This moves the **EDGE** piece to the top layer, and you can then follow the steps to place it correctly in the middle layer.



Step 5

THE YELLOW CROSS

Goal for
this step:



WHAT YOU'RE DOING

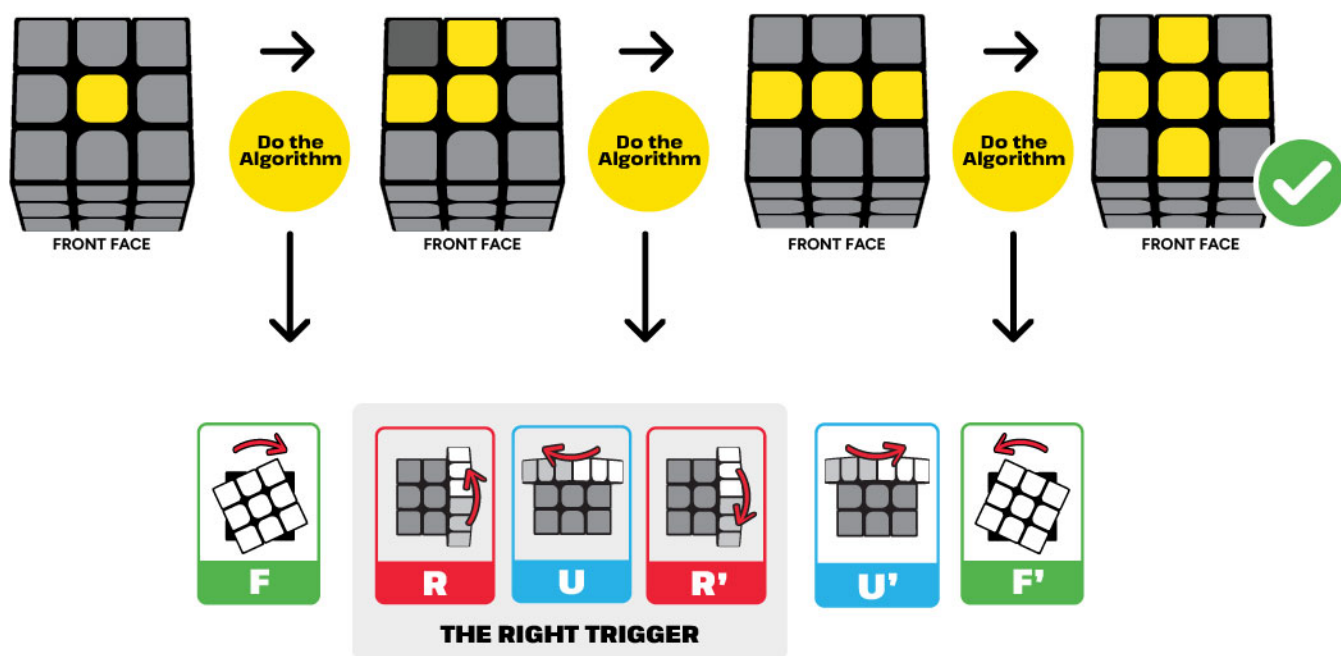
This step will adjust all of the yellow EDGE pieces to be face up on the up face that is surrounding the yellow CENTER. Don't worry if the yellow EDGE pieces don't line up with the other faces, you'll fix that later.

HOW TO DO IT

You'll learn a new set of moves, or an algorithm, that you'll repeat until the yellow cross appears on top of your Cube. Check the examples below to make sure you have the correct front face facing you before you begin the algorithm.

Find the UP face below that matches your Cube.

Perform the algorithm below until you see the yellow cross.



WOW! OVER HALF WAY THERE!

Great Job!

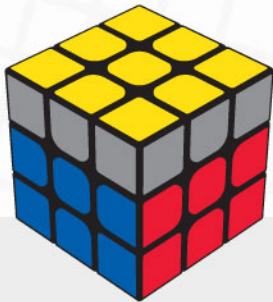
Keep going, you're almost done. Don't be afraid to go back and practice any steps that gave you trouble.



Step 6

THE YELLOW FACE

Goal for
this step:



WHAT YOU'RE DOING

Now you're going to flip the yellow CORNERS on the UP face so that all of the yellow tiles will be facing up. When you're done you'll see a full yellow face on your Cube.

HOW TO DO IT

Similar to the last step, you're going to look at the UP face of your Cube to determine the front face and how you'll hold the Cube. Then, perform the algorithm below. Repeat these steps. Recognize the pattern on the UP face and perform the algorithm until you've completed the yellow face.

Find the UP face below that matches your Cube.

You will not move through the configurations linearly. You may even see the same configuration twice in a row, keep going until the yellow face appears.



No CORNER Pieces in Position

Yellow tile facing out on the left CORNER



One CORNER Piece in Position

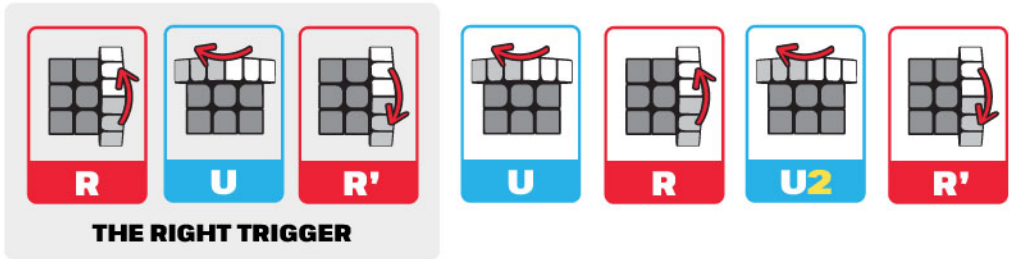
Yellow CORNER on bottom left of face



Two CORNER Pieces in Position

Yellow tile on top left of the front face

Notice how all three of these focus on the placement of the left CORNER closest to you on the UP face.

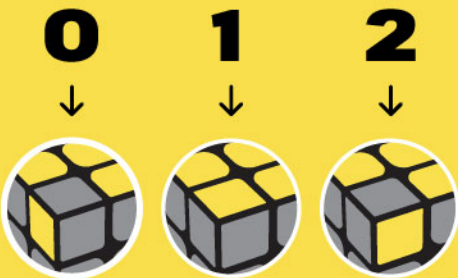


SOLVING NOTE ★

Check the number of yellow tiles, then position the UP layer for the correct front left CORNER piece.

Number of YELLOW CORNERS in position

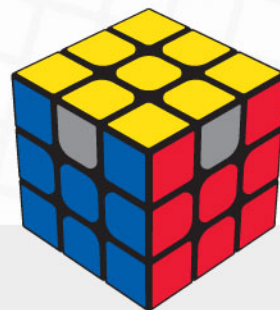
Position of UP FACE for algorithm



Step 7

THE YELLOW CORNERS

Goal for this step:



WHAT YOU'RE DOING

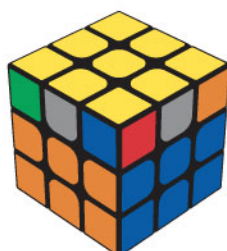
Now that you've got a completely yellow UP face, this step will work to move the CORNERS into their correct positions. As you're working through this step, the completed yellow face will go away, but don't worry, you'll bring it back by the end of the step.

HOW TO DO IT

There are two starting points to this step, you either start with two CORNER pieces that match on the same face, or you don't. If you don't, we'll work the process an extra time to make it so you do. You'll learn a new algorithm in this step while also bouncing back to the moves you learned in step 6. Take a look at your yellow CORNERS and determine where to start.

Which do you see?

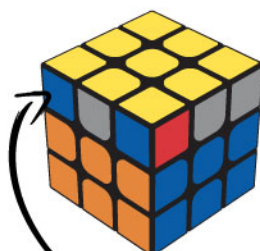
No matching CORNER pieces on the same face.



START

Using any face as the front, perform the first algorithm below. Then follow the instructions for the second algorithm which will give you two matching CORNER pieces on a face. Once you have that, you can follow the instructions to the right.

Two matching CORNER pieces on the same face.



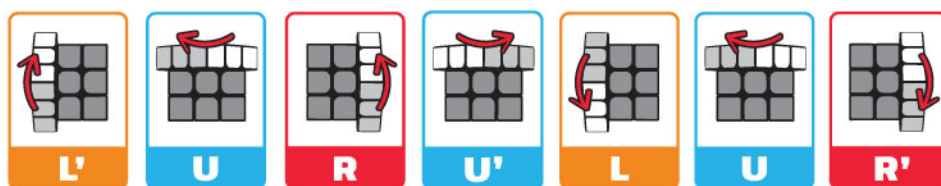
They could be any color, as long as they're the same.

START

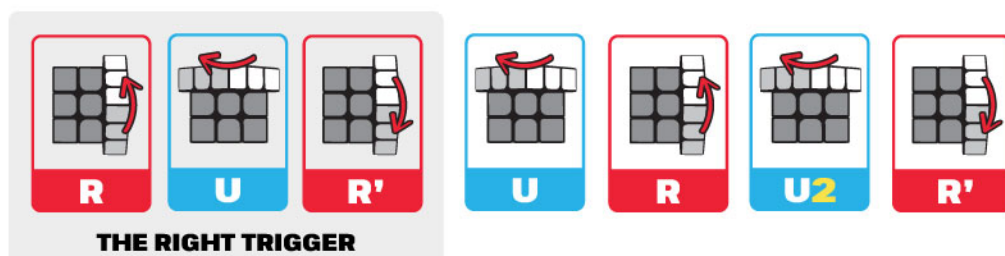
Rotate the matching CORNERS to line up with the correct CENTER.



Holding the matching face on the left, start with the first algorithm. Then follow the instructions for the second algorithm.



Don't be alarmed when your Cube looks like this, you did it right!
Just like in Step 6, do the below algorithm to go back to the yellow face.

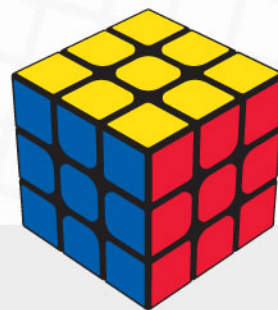


If you started with matching CORNERS, all of your CORNERS will be matching after the second algorithm. **Now you're ready for the last step!**

Step 8

THE YELLOW EDGES

Goal for
this step:



WHAT YOU'RE DOING

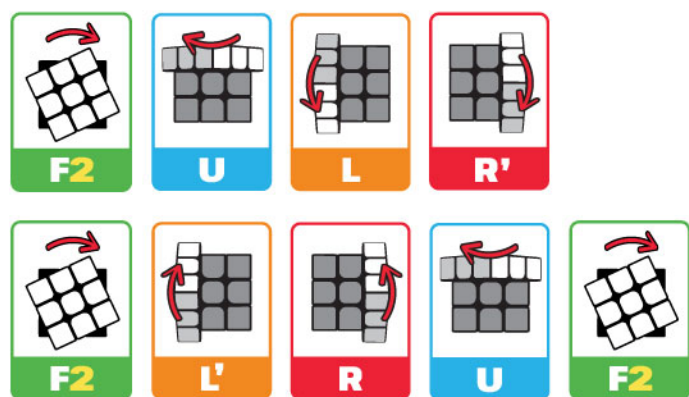
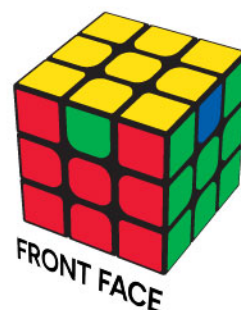
You're about to complete your Cube! This last step will move your yellow EDGE pieces around until they're all in the correct place showing your solved Cube.

HOW TO DO IT

If you have a solved face, position that face at the back, and then perform the algorithm below. If you don't have a solved face, you can use any face as the back. After you complete the algorithm, check to see if you have a solved face and make that the back. You may need to complete the algorithm as many as three times to move all of the yellow EDGES into place.

Hold your Cube with the solved face at the back.

Don't have a solved face? No sweat, use any face as the back and you'll have a solved face after you do the algorithm once.



Don't see a solved Cube?

You may need to do this algorithm up to two times. Make sure to keep the solved face at the back each time.

SOLVING NOTE ★

Notice how the back EDGE piece never moves while the other three rotate clockwise with each algorithm.

This is what is happening if you have to do the algorithm two times.





YOU DID IT!

Congratulations!

You've completed the journey and now you're a solver. Keep practicing so you can remember these steps.

Looks like you're ready to tackle something else you thought you couldn't do.

To continue your journey, download the Rubik's Small Solves app.

NEVER STOP SOLVING

