(https://cdn.instructables.com/F3H/FR0W/EOWZO5R1/F3HFR0WEOWZO5R1.MEDIUM.jpg)

(https://cdn.instructables.com/FX8/960R/EOWZC...
(https://cdn.instructables.com/FOD/9KIR/EOWZ...

Show All 10 Items

I got a 5x5 cube recently, and learned how to do it by only learning a few algorithms.

In order for you to be able to finish the cube, you will need to be able to solve a 3x3 cube, but being able to solve a 4x4 cube would also enhance your abilities for it, since the algorithms can be used on both.

If anything is unclear, just ask and I can clarify it for you

**Please note:**

1. This is a LONG INSTRUCTABLE. It will take time and effort to get through this cube, and you need to have some free time to solve your cube.
2. I am Canadian, so deal with the u in colour.
3. I am assuming you have a 5x5 cube. If you do not, they cost up to $40 CAD, so be prepared to spend a little bit of money on it.

Step 1: My Collection/experience

(https://cdn.instructables.com/F3H/FR0W/FOWZO5R1/F3HFR0WFOWZO5R1.MEDIUM.jpg)
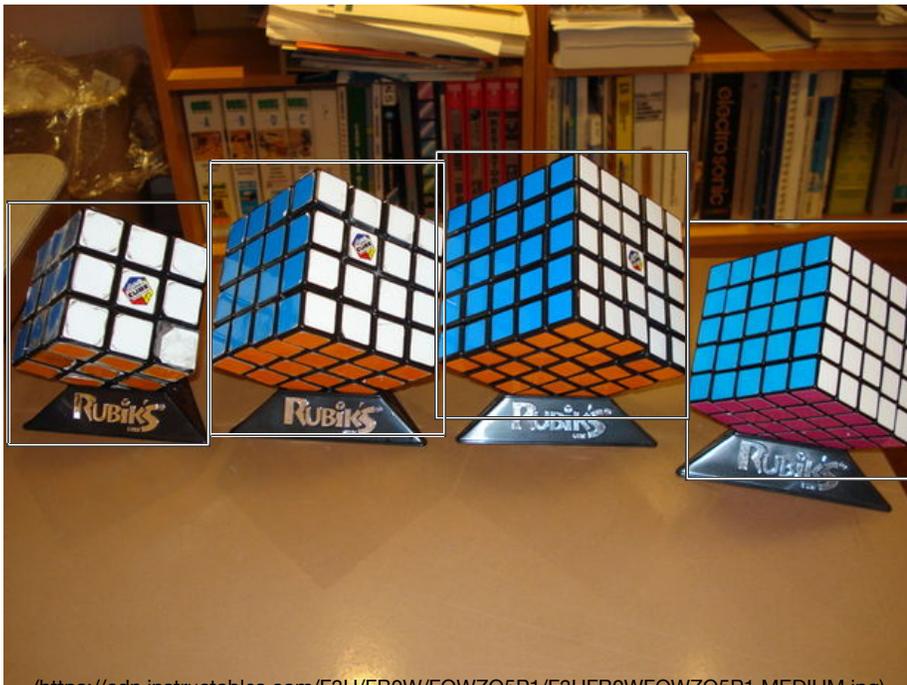
I started cubing over the summer of 2007. I got a dollar store "magic" cube, which was a cheap Rubik's cube. It came with instructions, which I memorized, and have now fine tuned so I can solve my cube with a 12 cube average of 51 seconds.

I can solve all the puzzles you see here, no instructions.
I found out how to do this by watching a long youtube video tutorial about how to solve this, and read some text instructions. I have 2 5x5 cubes, a few 3x3 cubes, and the 4x4 cube.

Step 2: My Solve

This is a video of me solving the cube using my solution. I have only been solving this since christmas, so a couple weeks and I dropped my time by about 20 minutes. I took a long time to solve it the first few times, because I was still learning algorithms. Now, my time is below 10 minutes.
By the way, that cube is not the one I am using in my instructions, its the Rubik's one.

Click to use Flash

Step 3: Getting Started

(https://cdn.instructables.com/FX8/960R/FQWZO5R0/FX8960RFQWZO5R0.MEDIUM.jpg)
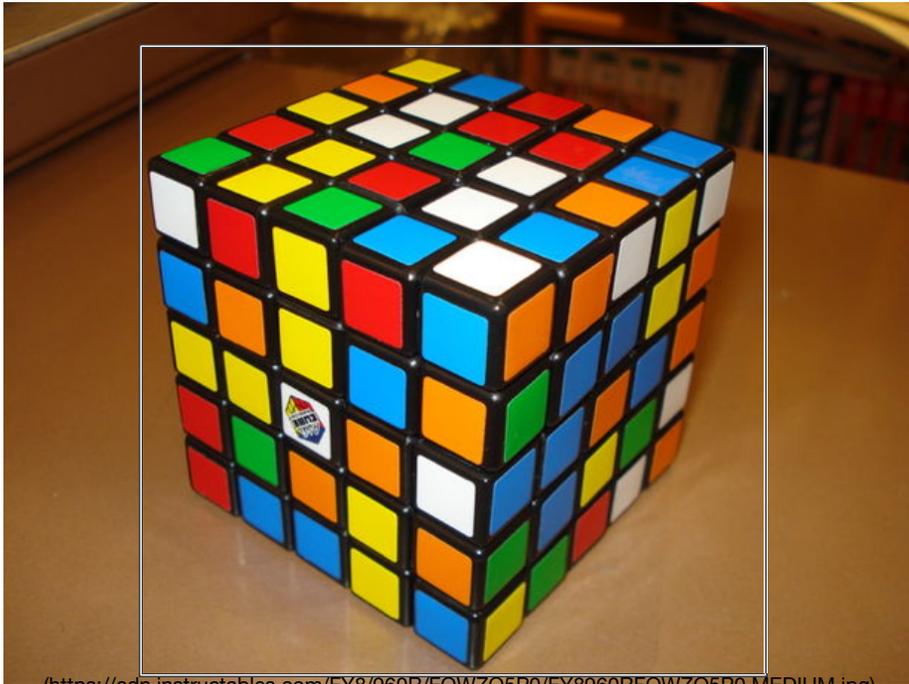
Ok, so the first step is to get your cube mixed up (I assume you have already done so, which is why you are reading this in the first place)

Step 4: Notation

(https://cdn.instructables.com/FK3/97C0/FQWZO5QX/FK397C0FQWZO5QX
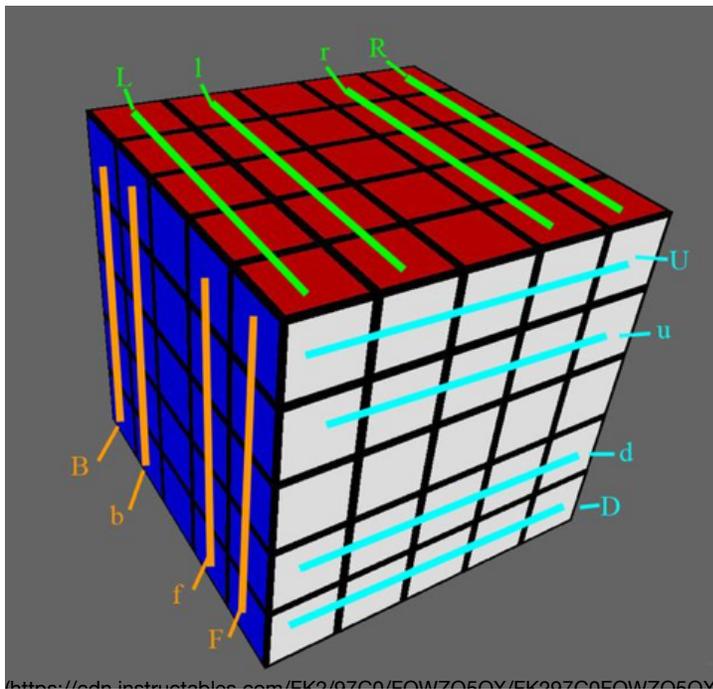
In the image below, you will see the notation I will be using. It is standard 5x5 notation, as far as I know. If just the letter is there, turn the face denoted clockwise, if you are looking at that side
' means counter clockwise.

I always solve my cube white centers first, then yellow, and the rest vary. It might help to follow how I am solving it if you start on white, then go to yellow, and work with my sides.

Step 5: Getting a 2x1 Block on the Side of Your Choice

(https://cdn.instructables.com/FS1ZMGR/FRIOL6X8/FS1ZMGRFRIOL6X8.MEDIUM.jpg)
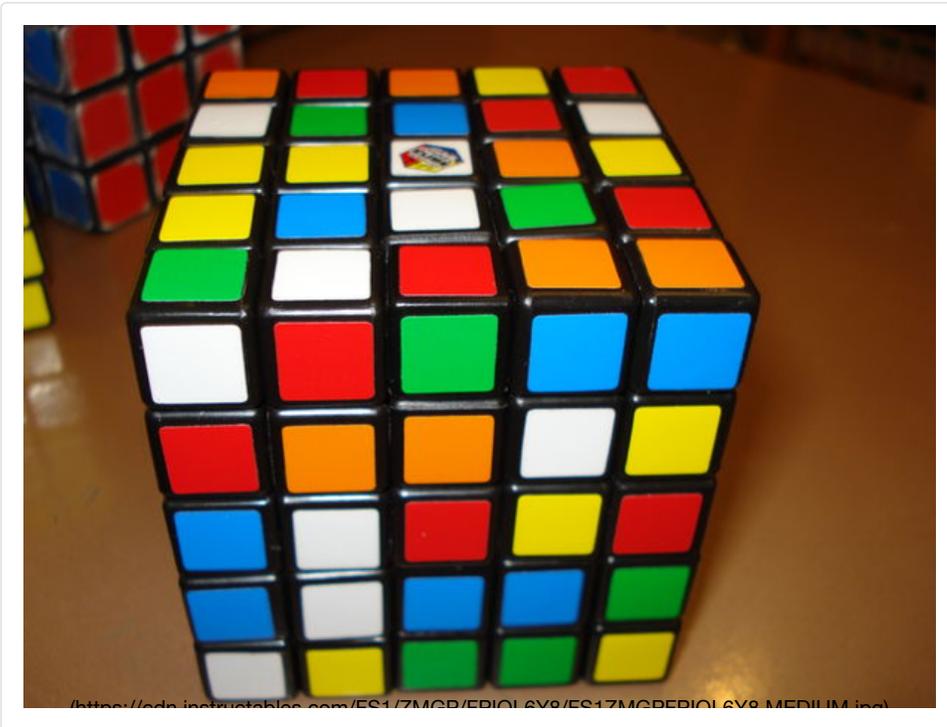
This is a rather simple step, just rotate any of the lower case letters (l ,r ,f , b) until there is a 2x1 cube

Step 6: Make a 2x2 Block

Now, make another 1x2 block, and make it match up with the other one,
leaving you a 2x2 block on the face you chose (white for me).

Step 7: Finishing the First Center
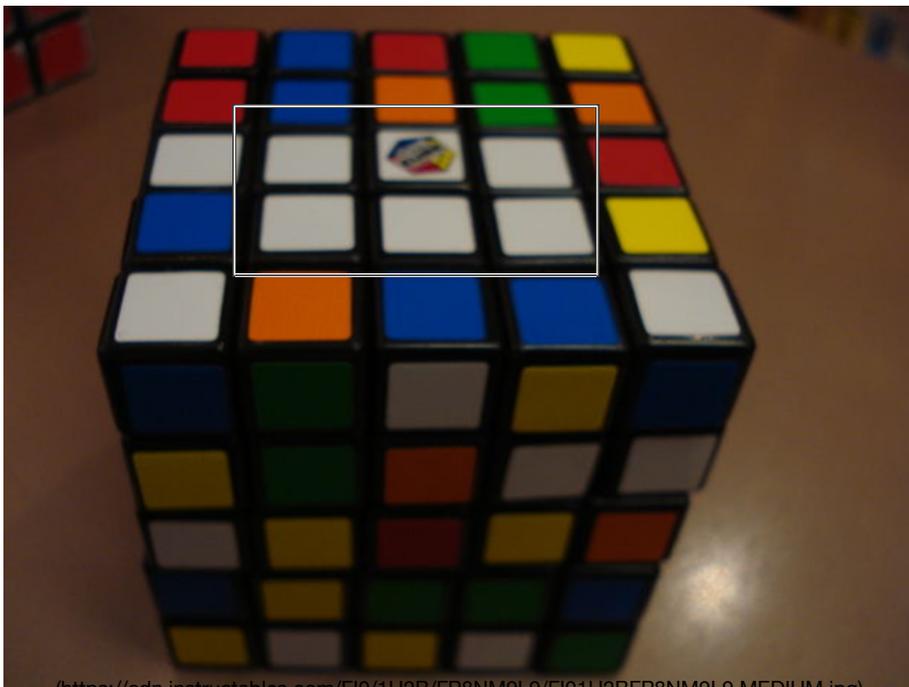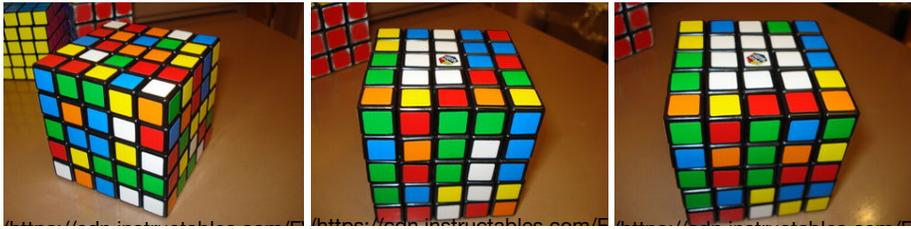
Create yet another 2x1 block, joining it to make a 2x3 block.

Make a 1x3 block with the remaining white pieces, but don't mess up the white 2x3 block in the process!

Try to use the side that has no white blocks on the 2x3 block, and form that 1x3, and insert it.

Step 8: Working on the Opposite Center
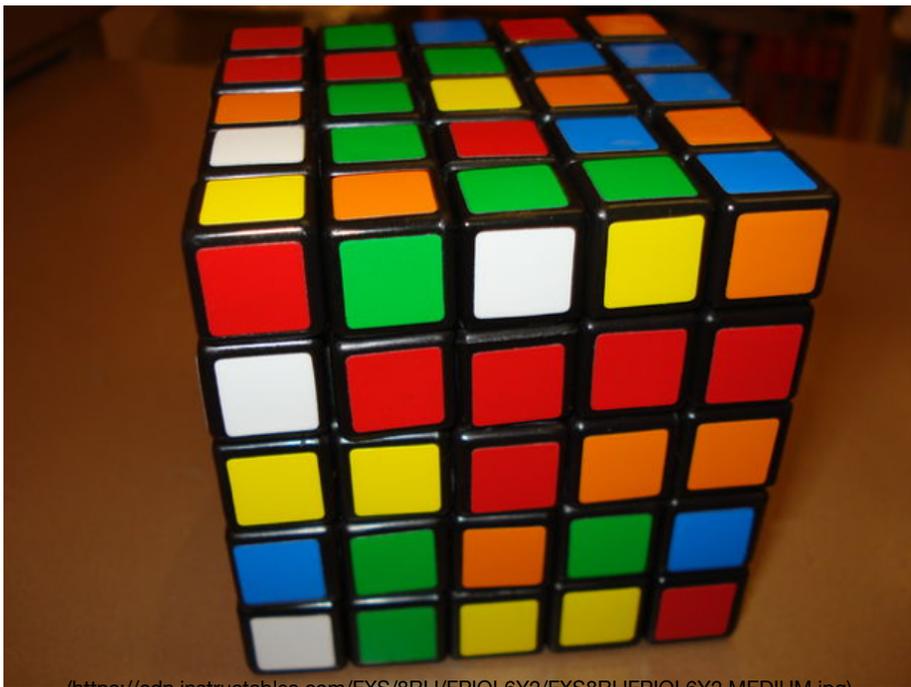
Now, flip your cube over. Make a 2x1 section. If you needed to rotate any faces, make sure you turn the piece out of the way, so that when you turn it back, the piece stays there. Make the 2x3 center on the yellow side using this method, and you are ready to move on.

Step 9: Finishing the Center.
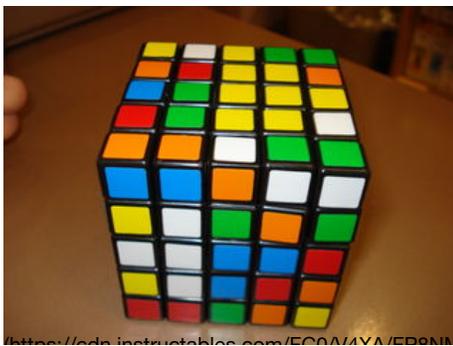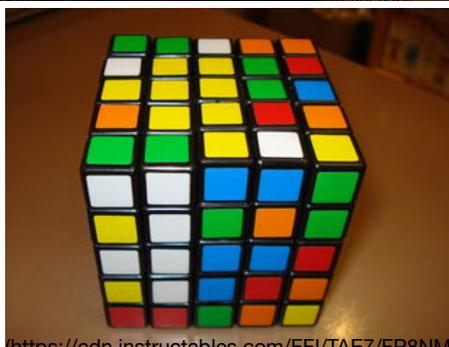
Make a 1x3 block of yellow, keeping the 2x3 and white center intact.

If you have the sides like they are in the first picture, then do the following:
Dd' Uu L2 Dd Uu'
It should now be a 1x3 block

Now, align it as in the second picture, and do the following algorithm:

LI' U2 LI

This completes the second center.

Step 10: The Third Center!
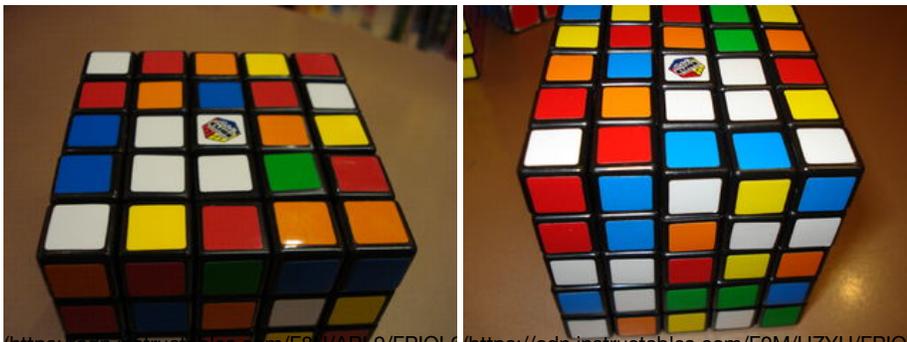
Find a colour that has a 1x2 or 2x2 block already assembled. This will be the next center you solve. In my case, it is orange.

Create a 2x1 block on a different side, and join it to the other one, that should have the center connected to it. It's just like solving the first center, just it's a bit easier to find the pieces. I forgot to take pictures, but I have put in the photos from steps 5-7 in, so you know it's the same thing.

HINT:
You won't mess up the completed centers if you hold the cube so that the white center is in your right hand, and the yellow center is in your left.

Step 11: The Fourth Center!

(https://cdn.instructables.com/FEO/ROR8/FR8NM9L5/FEOROR8FR8NM9L5.MEDIUM.jpg)

(https://cdn.instructables.com/FNM/5HVA/FR8N

(https://cdn.instructables.com/F96/ND2R/FR8N

(https://cdn.instructables.com/F80/CGR3/FR8N

(https://cdn.instructables.com/FHA/4RSG/FR8N
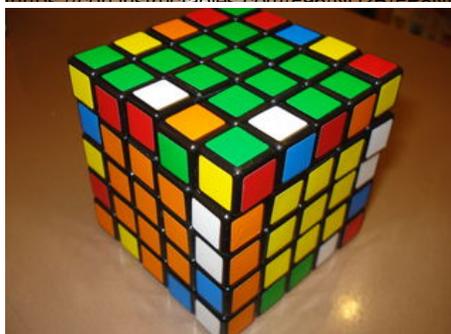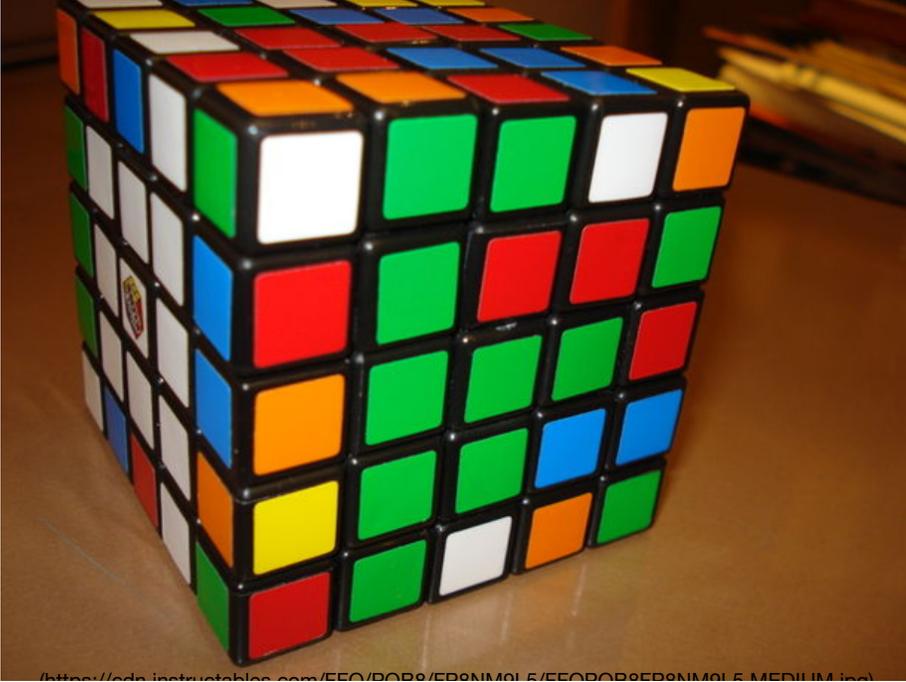
Pick a center adjacent to the one you just solved. If one is more solved than the other, then choose it. Green happened to be mostly solved, as can be seen in the pictures, so I chose that side.

Now, solve it like the second center, and then you have completed 4 of the 6 centers!

If you have a stray piece on your cube like in the picture, then do the algorithm used for putting the 3x1 section into the center, but make sure no greens go in!

Step 12: The Final Two Centers!
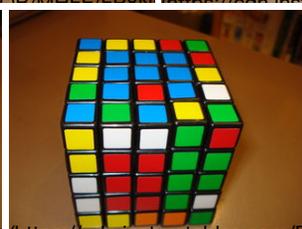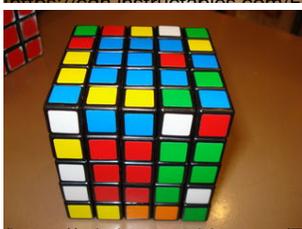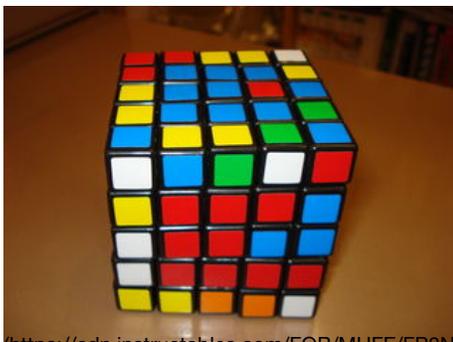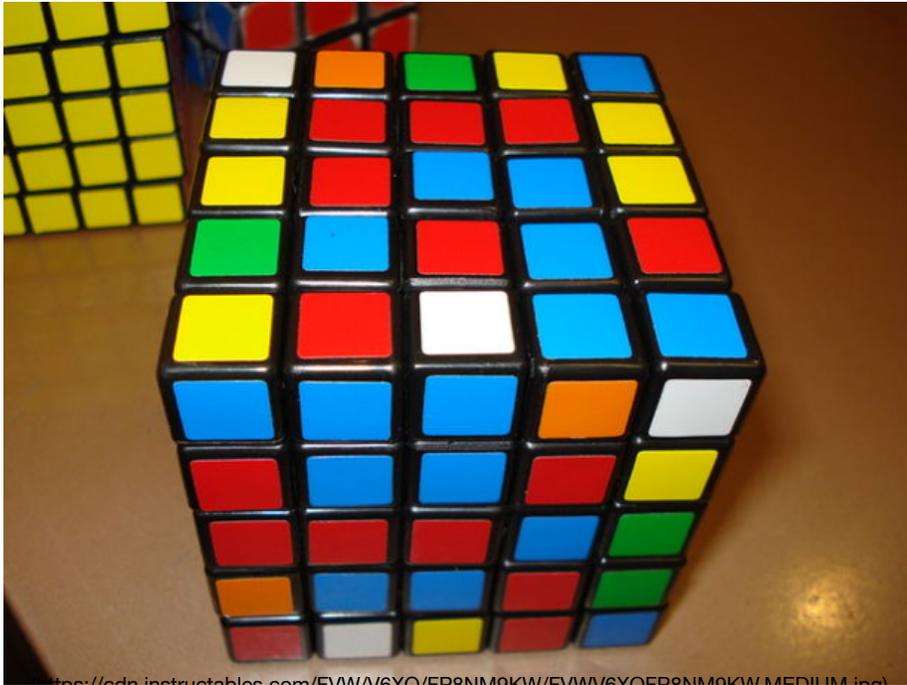
Show All 8 Items

Now, there should be only two different colours on the unsolved sides.

Using the algorithm for moving those pieces around(Ll' U2 Ll), get as many of the colour on its respective side. In my case, I am getting as many blues on the blue side, and reds on the red side as humanly possible. The inverse also works, and on the right side. Possible algorithms are:
Ll U2 Ll'
Ll' U2 Ll
Rr U2 Rr'
Rr' U2 Rr

If you have a case like in the second photo, you need to get the red center on the red side, and the blue center on the blue side. Then, align them as shown in the picture, and perform this set of moves:
r U' M U r' U' M'
(M is the middle, rotate it in the same direction as R)

You may need to repeat this multiple times to solve both parts, but after they are solved, we move on the the most time consuming part of the cube: Pairing

Step 13: Pairing

(https://cdn.instructables.com/FOF/T7KR/FR8NM9KF/FOFT7KRFR8NM9KF.MEDIUM.jpg)

How to Solve a 5x5 Rubik's Professor Cube by
Does Not Compute (/member/Does+Not+Compute/) in puzzles (/play/puzzles/)

| Download | ::: (/id/How-to-solve-a-5x5-Rubiks-Professor-cube/) | 15 Steps | ▶ |

+ Collection   I Made it!   ♥ Favorite   ◀ Share ▾   ⚑
                                              advertisement
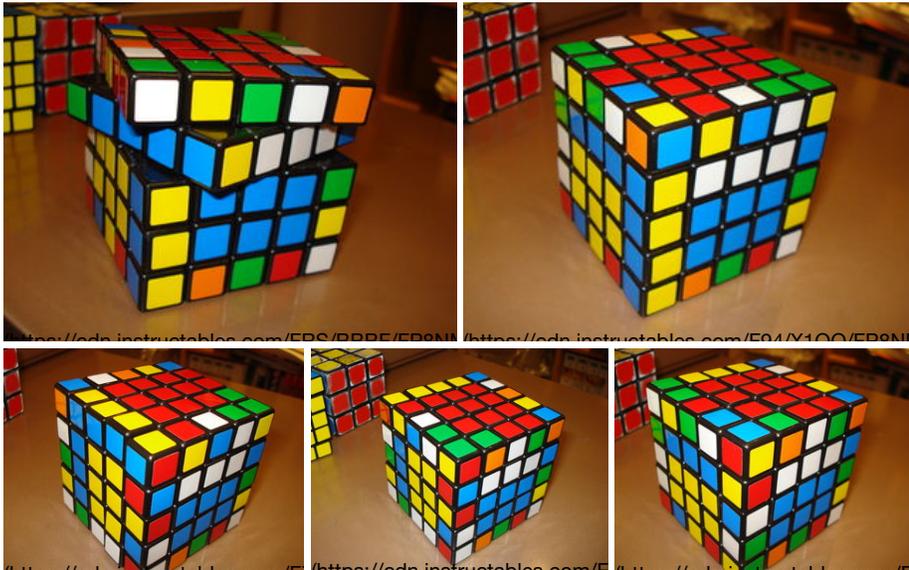
Show All 7 Items

Yes, this is a painfully time consuming step. I know

Find 2 edges that have the same colours on them, and arrange them like in the picture. I turned the layer with the edge on it so that it is one photo instead of 2

Now, to pair these edges, we find an unmatched pair in the top face. Rotate the cube as much as you like, you barely have to worry about messing up the centers anymore. For the following case, you need to perform the following (It's all logic, I'm just giving you algorithms to make it easier.):
(Uu) L' U L (Uu)'
The U can be replaced with U2 or U' as well

The logic method:
Move the cubie into position, swap it with an unpaired edge, and return the centers to the completed state.

Moving on:
Make sure that all the center edges are facing the same way as the outer edge pieces
This will work until you have 2 edges that are not solved.

Step 14: Parity Errors

(https://cdn.instructables.com/FR1/AF3D/FR8NM9K2/FR1AF3DFR8NM9K2.MEDIUM.jpg)

(https://cdn.instructables.com/F6H/ULYZ/FR9...

(https://cdn.instructables.com/FOU/RINL/FR8NM...
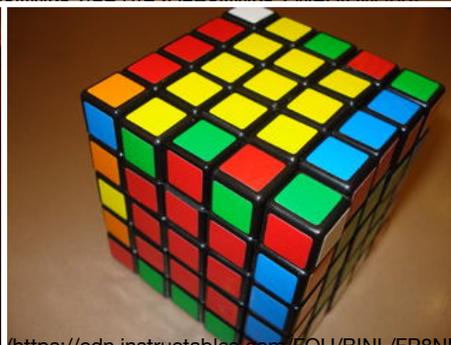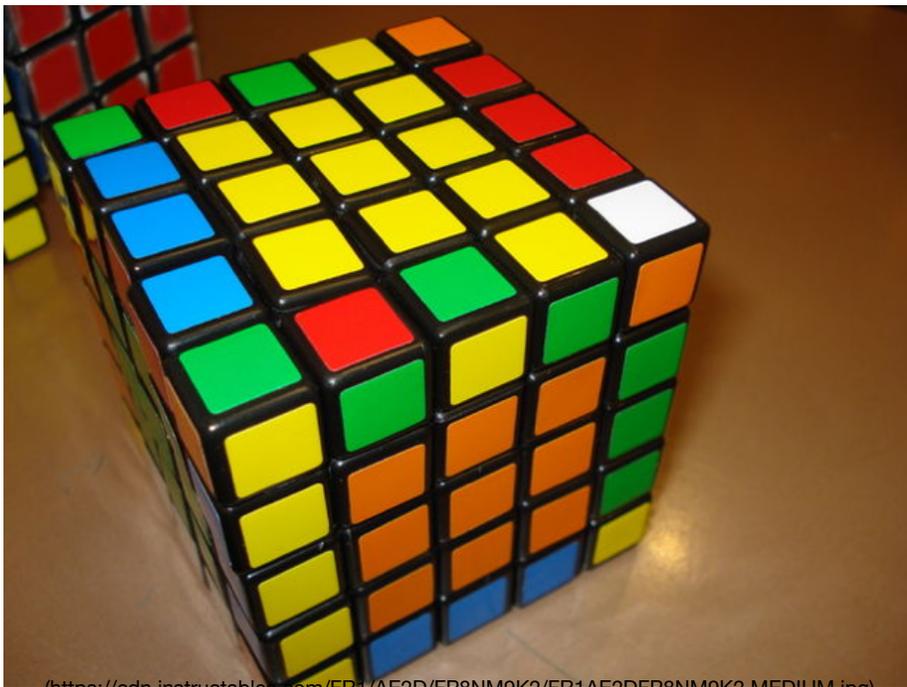
Sometimes, the cube does not always finish to be like a 3x3. If you have your cube looking like a 3x3, then move on to the next step for now. Otherwise, look at the pictures and determine which parity error to solve. For the example in the first picture, hold the cube so that the 2 sdes you are switching are on the right hand side. Then, use this algorithm (This is one of the ones I had to learn to solve this):
(Ll)' U2 (Ll)' U2 F2 (Ll)' F2 (Rr) U2 (Rr)' U2 (Ll)2
This can also be used in solving the 4x4.

Just arrange the cubies so that they are in that manner, and you can get it to have sections like a 3x3, and solve it. You may need to repeat that algorithm a few times.

Step 15: Done!

(https://cdn.instructables.com/FOD/9KIP/FOWZO5PB/FOD9KIPFOWZO5PB.MEDIUM.jpg)

(https://cdn.instructables.com/F3H/FR0W/FOWZO5P1/F3HFR0WFOWZO5P1.MEDIUM.jpg)
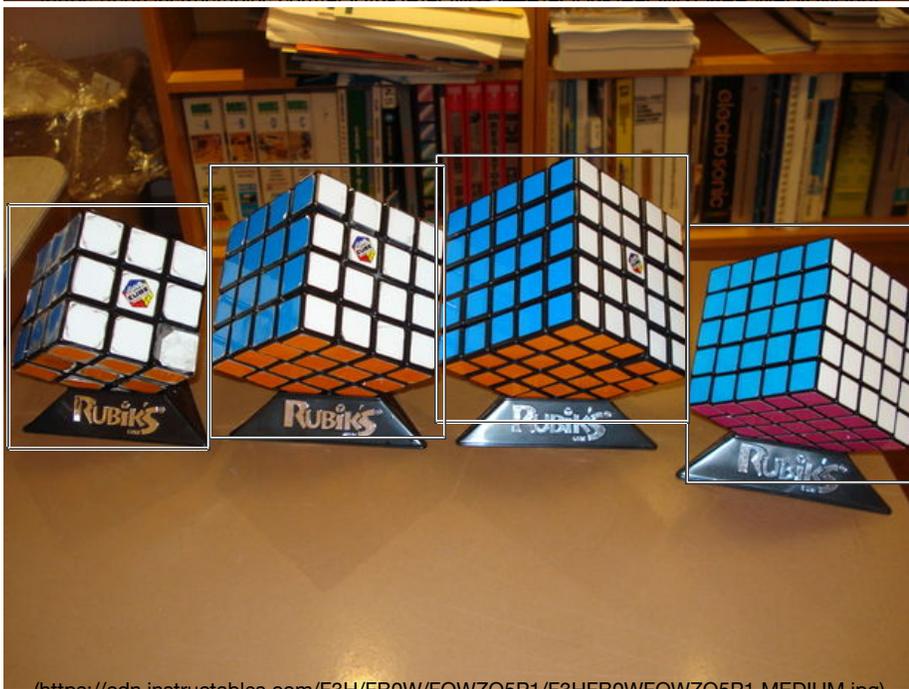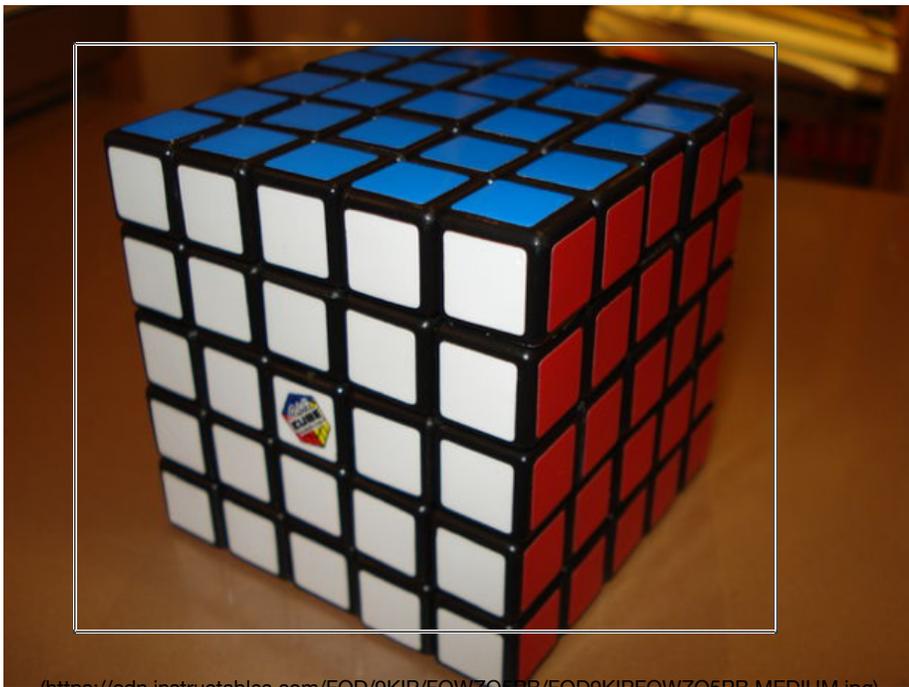
Now, solve the cube like a 3x3. I use the beginner method, but you can use whatever method you like.

If you have any questions, problems, comments, or critiques, post them as a comment below.

Also, if you need more photos, I will make some more. I don't know that they

will be exactly the same, but the photos I took were very minimal. If you need help solving it like a 3x3, I am working on an instructable for that next. (Don't worry, I have a newer cube than the one in the photos)

Comments

We have a be nice comment policy.
Please be positive and constructive.

✋ I Made it!   📷 Add Images   Post Comment

KatarzynaG5 (/member/KatarzynaG5/)   2017-10-02   Reply

Help, I have a parity case for centers on a 6x6.

(https://cdn.instructables.com/FPA/BPKT/J86HS9U2/FPABPKTJ86HS9U2.LARGE.jpg)

KatarzynaG5 (/member/KatarzynaG5/) ▸ KatarzynaG5 (/member/KatarzynaG5/)
2017-10-05   Reply

I realized I can actually solve that by 4x4 edge pairing, reducing it to 5x5 centers! Yay!

KatarzynaG5 (/member/KatarzynaG5/) ▸ KatarzynaG5 (/member/KatarzynaG5/)
2017-10-08   Reply

And also a modified version of this for 7x7!

Chicken2209 (/member/Chicken2209/)	2009-01-03	Reply

Why do people consider that a parody?
that makes me mad
=0
oh noes! more and more people are learning to solve the other cubes
im running out of things to brag about
but I still got my 7, :P

KatarzynaG5 (/member/KatarzynaG5/) ▸ Chicken2209 (/member/Chicken2209/)
2017-10-01	Reply

it's spelled p a r i t y

Does Not Compute (/member/Does+Not+Compute/) ▸ Chicken2209
(/member/Chicken2209/)	2009-01-04	Reply

umm about that... i could make a tutorial about how to do the 7 or 6,
except that i hate doing tutorials for cubes I don't personally own. My
first solve of the 7x7 was about 42 minutes, done today. If/When I get my
cube, then I could make the tutorial xP But then again, its the same thing
as 5x5, just more layers, more concerns, etc. The speedcubing corner
swap is a good one for 7x7 though. Attached is a screen shot after my
first 7x7 solve.

(https://cdn.instructables.com/F2X/47SV/FPIUQUF1/F2X47SVFPIUQUF1.LARGE.jpg)

Ikotoo (/member/Ikotoo/)	2009-01-14	Reply

I modified the algorithms for a 3*3*3 Rubiks cube to work for my 5*5*5, and it
worked well, I am able to solve it. I found the 5*5*5 easier then the 4*4*4. Great
Tutorial, you cover everything.

KatarzynaG5 (/member/KatarzynaG5/) ▸ Ikotoo (/member/Ikotoo/)
Reply
2017-10-01

I think in 5x5 you don't have to deal with parity (in the method I
use), but in other hand there are more centers and edges to pair.

Does Not Compute (/member/Does+Not+Compute/) ▸ Ikotoo (/member/Ikotoo/)
2009-01-14	Reply

I also find the 5x5 easier than the 4x4, but then again,
my 4x4 pops, and I solve it differently because I hate that one parity
problem where the cross just doesn't work. I solve one side, the other
side, then everything in between. I find it faster than doing it the other

way, but the biggest thing you could run in to is a whole 2x2 center being in the wrong place.

Ikotoo (/member/Ikotoo/) ▸ Does Not Compute (/member/Does+Not+Compute/)

2009-01-19　　　Reply

Yeah, parity with the 4*4*4 is much more difficult. it took me about two days to find a way to get out of it while it took me and hour or so with the 5*5*5. Your way of solving the 4*4*4 is really cool, I will have to try it some time.

---

nurdturd (/member/nurdturd/)　　　　　　2011-04-09　　Reply

I ran into a weird parody where one edge has all of the right colors on it but one is oriented the wrong way. Got any algorithms?

KatarzynaG5 (/member/KatarzynaG5/) ▸ nurdturd (/member/nurdturd/)　　Reply

2017-10-01

it's spelled P, A, R, I, T, Y

---

mashedpotato13 (/member/mashedpotato13/) ▸ nurdturd (/member/nurdturd/)

2011-06-25　　Reply

RR2 B2 U2 LL U2 RR' U2 RR U2 F2 RR F2 LL' B2 RR2

Or what he used on step 14. (The one above is longer, but somewhat easier to memorize.)

B3tray3dQU (/member/B3tray3dQU/)　　　　　2011-09-04　　Reply

Im at a parody that on the last step where you make the cross on the top layer, I have every side except 1, I know there is an algorithm for my 4x4 but forgot it, and not sure how to do it on the 5x5. Help please? And also I have 2 corners correct on the top layer to start with, so I know there is an algorithm for the switching of 2 corners but can't find it in my manuals or on the internet. Can you please help me with this?

KatarzynaG5 (/member/KatarzynaG5/) ▸ B3tray3dQU (/member/B3tray3dQU/)

2017-10-01　　Reply

it's called parity, not parody

JaxonTM (/member/JaxonTM/) ▸ B3tray3dQU (/member/B3tray3dQU/)　　Reply

2012-02-13

The parody Algorithm: 2Rr, 2B, 2U, Ll, 2U, Rr', 2U, Rr, 2U, 2F, Rr, 2F, Ll', 2B, 2Rr.
this may result in and edge swap (the opposite edges are swapped) put them in the TB and TF edges, and perform; 2Uu, 2Ll, 2U, 2l, 2U, 2Ll, 2Uu. that should fix those problems.
the algorithm to swap the two corners: place the two solved corners in

---

the back of the cube (assuming the top is solved and not permuted) perform; R', F, R', 2B, R, F', R', 2B, 2R. email me at twpyromaniac@gmail.com if you have any other cubing questions

---

KatarzynaG5 (/member/KatarzynaG5/)   2017-10-01   Reply

I use a somewhat different method: in both 4x4 and 5x5, I use l' U L' U' l to shift edges, and carefully plan the last 3 so that it perfectly reduces to 3x3. In case of 4x4, I also use OLL and PLL parity algorithms.

(https://cdn.instructables.com/F8M/PYDX/J86HS8QU/F8MPYDXJ86HS8QU.LARGE.jpg)

__icareforyou__ (/member/__icareforyou__/)   2017-03-01   Reply

Hi! Can you suggest a move to fix this? Everything is already in place except these two. Thank you! ??

(https://cdn.instructables.com/FYO/G9BX/IZQA47BW/FYOG9BXIZQA47BW.LARGE.jpg)

GabrielG205 (/member/GabrielG205/) ▸ __icareforyou__ (/member/__icareforyou__/)

2017-03-07   Reply

•(Rr)2
•(B)2
•(U)2
•(Ll)
•(U)2
•(Rr)'
•(U)2
•(Rr)
•(U)2
•(F)2
•(Rr)
•(F)2
•(Ll)'
•(B)2
•(Rr)2

The EverydayC (/member/The+EverydayC/) ▸ __icareforyou__
(/member/__icareforyou__/)　　　　　　　　　　2017-03-02　　| Reply |

hey I'm having this problem to its an oll parity do this (RW2 B2 U2 F2 LW'
U2 F2 LW' F2 RW U2 RW' U2 LW2) then t gives you another parity that's
what I'm trying to find

---

sheetalp4 (/member/sheetalp4/)　　　　　　2017-01-24　　| Reply |

After solving the whole cube....i got this parity...how to solve this parity...i found
nowhere on the internet....3x3 cube don't have this parity....

(https://cdn.instructables.com/F4G/GU8I/IYB28YGF/F4GGU8IIYB28YGF.LARGE.jpg)

Hutchem14 (/member/Hutchem14+/) ▸ sheetalp4 (/member/sheetalp4/)　| Reply |
　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　2017-02-01
It is the yellow edge parity look it up for the four by four it is the
same algorithm

Daniel Schade (/member/Daniel+Schade/)　　2017-01-29　　| Reply |

I tried for my own with a different strategy...
Can you help me to fix that last row?
Everything else ist already done...

(https://cdn.instructables.com/F84/41B5/IYGFKZE8/F8441B5IYGFKZE8.LARGE.jpg)

Ashchinala2004 (/member/Ashchinala2004/)　　2016-12-28　　| Reply |

What about this, I think something happened to my cube

(https://www.instructables.com/static/defaultIMG/file/default.MEDIUM.VIDEO.gif)

ekou2 (/member/ekou2/)   2016-12-28   Reply

I did it! I just needed help solving the centers. I can solve a 4x4. Oh, and I don't need the edges parity. I know how to deal with that one so I won't run into it.:)

MattR123 (/member/MattR123/)   2016-05-05   Reply

can someone give me the alg for this, I can't find it *anywhere!!*

(https://cdn.instructables.com/FZZ/KBWI/INU1GTPV/FZZKBWIINU1GTPV.LARGE.jpg)

JeffreyS89 (/member/JeffreyS89/) ▸ MattR123 (/member/MattR123/)   Reply
2016-05-16

That Mate is not a parity. Its just a simple cross case.
Holding the L shape with one yellow edge at the backa and one to the left do this algorithm.
F U R U' R' F'

30200mel (/member/30200mel/) ▸ JeffreyS89 (/member/JeffreyS89/)   Reply
2016-12-24

how do u solve the 5 x 5

ekou2 (/member/ekou2/) ▸ 30200mel (/member/30200mel/)   2016-12-28   Reply

Didn't it just say?

MattR123 (/member/MattR123/) ▸ JeffreyS89 (/member/JeffreyS89/)   Reply
2016-05-29

thank you so much! I feel really dumb now! I thought it was like the 4x4, and The cross was pre solved!

JeffreyS89 (/member/JeffreyS89/) ▸ MattR123 (/member/MattR123/)   Reply
2016-05-30

Curious what cube that is. Is it a Moyu?
I use the Moyu Bochuang GT. Really nice puzzle. I average under 2:40...
Need more work on my solving.

MattR123 (/member/MattR123/) ▸ JeffreyS89 (/member/JeffreyS89/)   Reply

It is a Yuxin.   2016-05-30

JeffreyS89 (/member/JeffreyS89/) ▸ MattR123 (/member/MattR123/)   Reply
                                                               2016-05-30
Just curious at to what cube that is... Is it a Yuxin? I use a
Moyu Bochuang and average under 2:40... Need more mork lol.

MasterA9 (/member/MasterA9/) ▸ MattR123 (/member/MattR123/)   Reply
                                                               2016-08-06
It is not a parity.Use the cross alg of beginners method and
solve it like a normal 3x3

MASTERMIND2368 (/member/MASTERMIND2368+/) ▸ MattR123
(/member/MattR123/)   2016-06-07   Reply

you can do F sexy, sexy F' or you can do U2 M' U M U2 M' U M

MASTERMIND2368 (/member/MASTERMIND2368+/) ▸ MattR123
(/member/MattR123/)   2016-06-07   Reply

you can do F sexy, sexy F' or you can do U2 M' U M U2 M' U M

Arcademedes (/member/Arcademedes/)   2016-12-28   Reply

I have a PLL parity does anyone know the algorithm for this

TahmidA2 (/member/TahmidA2/)   2016-09-24   Reply

How can i solve this?

(https://cdn.instructables.com/FRP/BPGE/ITCHANR0/FRPBPGEITCHANR0.LARGE.jpg)

---

quangt29 (/member/quangt29/) ▸ TahmidA2 (/member/TahmidA2/)   Reply
                                                               2016-09-24
With the Green is F (your pic), turn your cube to the left 90
degrees, use (U'u' R F' U R F Uu) (Dd R F' U R F D'd')

TahmidA2 (/member/TahmidA2/)   2016-09-24   Reply

Guys i need help

stevie012939 (/member/stevie012939/)   2016-07-25   Reply

I have a problem with mine,i was matching the edges and i have all my edges
matched except 2 centre pieces

King Leonardo (/member/King+Leonardo+/)   2015-06-20   Reply

Is there an algorithm for this?

(https://cdn.instructables.com/FVN/UZR3/IB4A4HXL/FVNUZR3IB4A4HXL.LARGE.jpg)

(https://cdn.instructables.com/FOI/21D6/IB4A4HXQ/FOI21D6IB4A4HXQ.LARGE.jpg)

gumble613 (/member/gumble613/) ‣ King Leonardo (/member/King+Leonardo+/)
                                              2016-07-19   Reply
http://www.alchemistmatt.com/cube/5by5cube.html.

They have here all for it.

TMCuber (/member/TMCuber/) ‣ King Leonardo (/member/King+Leonardo+/)
                                              2016-06-28   Reply
Not any that I know of. You'll have to redo the edges,
so that's why I don't solve the 5x5 cube. You have to exposition edges A
LOT.

TMCuber (/member/TMCuber/) ‣ TMCuber (/member/TMCuber/)
                                                           Reply
Reposition not Exposition   2016-06-28

MASTERMIND2368 (/member/MASTERMIND2368+/) ‣ King Leonardo
(/member/King+Leonardo+/)   2016-06-07   Reply

If he didn't cover this notation above, a letter that is not capotal means
turn the second layer.

l U2 l U2 F2 l F2 r U2 r' U2 l2. Did that help?

swaggyjohncena (/member/swaggyjohncena/) ▸ King Leonardo
(/member/King+Leonardo+/)   2016-04-26   Reply

I have same cube as you, you can take off stickers

Cubers01 (/member/Cubers01/) ▸ King Leonardo (/member/King+Leonardo+/)
                                                    2015-11-30   Reply

Yes there is....

TherubiksSolver8219 (/member/TherubiksSolver8219/) ▸ Cubers01
(/member/Cubers01/)   2016-02-01   Reply

then what is it?

Langsley757 (/member/Langsley757/)   2016-06-30   Reply

I can't find any alga for 4x4 oll and pll parties.

Plz help.

⬇ More Comments
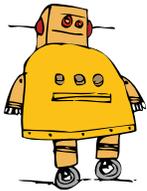
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