How to Get Faster

If you've practiced and become pretty good at solving the cube, it's time to get faster. This page should help you out.
Note: if you are looking for a guide to solving the cube, check out tiny.cc/solveit

Cross

By this point, you should be solving the cross directly, not using the daisy method, and it shouldn't take you more than seven seconds. Your cross should also be solved on the bottom. Make sure you know where the pieces are before you start solving, and play around to find the best way to solve certain cases. It is sometimes best to put the pieces one spot away from where they belong, and then do a D move to place them correctly. Begin planning out your cross before solving.

First Two Layers (F2L)

Make sure you can execute the moves you are doing quickly by flicking your fingers rather than turning your whole hand. If you are using a Rubik's brand cube, this probably isn't possible, so you should see "Cube Type" section of this guide. You should also focus on looking ahead to find the next piece while putting in the current piece so there are no pauses in your solve. This is called lookahead, and is extremely important as you get faster, so start practicing now.

Orientation of the Last Layer (OLL)

Doing the Sune over and over means you don't have to learn many algorithms, but it slows down your solve. There are seven algorithms you can learn so that you can orient the corners in one step (or 6 since you already know the Sune). However, you should probably learn the PLL algorithms in the next section first, as there are fewer of them, and they are easier. So, OLL algorithms are at the end of this guide.

How to Learn Algorithms

From this point on, you'll have to learn algorithms. It's not too hard if you take it slow. I will separate all algorithms into chunks using parentheses. Each chunk can usually be executed using a quick finger trick combination. Note that the few algs written as one chunk are usually executable without changing your hands' position.The way I learn is I learn a chunk, execute it a few times without looking, then add on the next and repeat. Also, you can look up other algorithms if you don't like these ones. The ones given are just the ones I use.

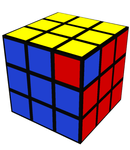
Permutation of the Last Layer (PLL)

At this point, you should know that there are some cases when you must execute the corner swap (A Perm) or edge rotation (U Perm) algorithm twice. Here are three algorithms that will help you never have to execute an algorithm more than once:

Y Perm

If there are no same-colored corners next to each other:

(F R U' R' U')
(R U R' F')
(R U R' U')
(R' F R F')



H Perm

If the edges need to be flipped straight across the cube:

M2 U M2 U2 M2 U M2

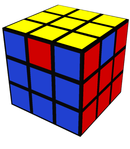
(Flick the M slice using your ring or middle finger or both)

Z Perm

If the edges need to be switched with an adjacent edge:

M2 U M2 U M' U2
M2 U2 M' U2

Note that you should hold it so the front and right edges need to switch places



Cube Type

If you are interested in getting faster (you shouldn't be reading this guide if you aren't), then you need to use a speedcube. The regular Rubik's brand cubes are slow, hard to turn, and don't cut corners, meaning the cube has to be perfectly aligned in order to make a turn. All of this means that you have to use your wrist in order to make turns rather than flicking with your fingers, and turning with your whole hand really slows you down. I personally use the Thunderclap. I always buy cubes from thecubicle.us because they have good prices with free shipping, have all the popular cubes available, and they have great service. While you are free to buy any speedcube you want from anywhere you want, you should do some research on the cube you are buying, as some cubes (such as DaYan cubes) were the best cubes at the time, but have now been surpassed by newer cube technology (though some people still prefer them).

You should also probably buy some lubricant to put in your cube – it minimizes wear and tear to the cube, and makes your cube faster. The Cubicle sells lube (I prefer Cubicle Lube weight 4) but I usually buy a bottle of Traxxas Lube from Amazon and I have a dispenser from The Cubicle to put it in. I just do this because it is cheaper – there are certainly other good lubricants; this is my preference. However, DO NOT use Vaseline on anything but a Rubik's brand – it will corrode your cube.

OLL Algorithms

Note: Each case has various names. The ones here are the ones I use.

Symmetrical Cross

F (R U R' U') (R U R' U') (R U R' U') F'

This is just F, three cycles, F'

Asymmetrical Cross

(R U2' R2' U' R2 U' R2' U2' R)

Chameleon

(r U R' U') (r' F R F')

Bowtie

F' (r U R' U') (r' F R)

Just like Chameleon, just the F' is moved to the back

Headlights

(R' U2) (R F U') (R' U') (R U F')

Sune

(R U R' U R U2 R')

You already know this!

Antisune

(R' U' R U' R' U2 R)

Kind of like the opposite of Sune

What Next?

Keep practicing, as practice is one of the most important factors in getting faster. At this point, I recommend that you go to a competition. Don't let that word intimidate you – it's not really a race and people compete to try to improve their own times, not win the entire thing (well, someone will win, but most people go knowing they won't and just want to have a good time). You are fast enough to compete if you can solve in under ten minutes, which you can. Go to CubingUSA.com and see if there are competitions nearby if you live in the US, otherwise, check worldcubeassociation.org for competitions. You also may want to join the SpeedSolving.com forum, as they have very knowledgable people that can help you improve. I'm working on a follow-up to this guide that I will post when it's finished – for now, you can consult this guide, but be sure to check out other methods such as Roux and ZZ before dedicating yourself to Fridrich entirely – it may not be the best method for you. Have fun in your cubing adventures!

As always, contact cubeguide@matthewmcmillan.me with any questions or comments!

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