CFOP Speedcubing Guide 2016 v1.0 by pr0ject1le

First 2 Layers

You must solve the cross first. It can be done in 6 moves or less ~82% of the time and ≤7 moves 99.95% of the time. These are just optimal example solves. F31 should be said to said the said the said to said the said t 99.95% of the time. These are just optimal example solves; F2L should be solved intuitively.

Easy Cases (1-4)

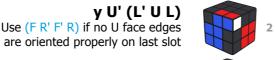


U (R U' R') Use (R' F R F') if no U face edges are oriented properly on last slot



y (L' U' L) Note: this image is blue and red because a cube rotation is required

y U' (L' U L) Use (F R' F' R) if no U face edges



Note: this image is red and green because no cube rotation is required



Reposition Edge (5-8)



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



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



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



Reposition Edge & Flip Corner (9-14)



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

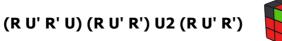


U' (R U2 R') U (F' U' F)



y' U (R' U R U') (R' U' R)

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



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



Split Pair by Going Over (15-18)



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



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

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

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



Pair Made on Side (19-22)



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



Weird (23-24)

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





F' (L' U2 L) F



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



Corner in Place - Edge in U Face (25-30)

b2/Bw2

f2/Fw2

u/Uw



f'/Fw'

b'/Bw

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

r'/Rw'

u'/Uw'

r2/Rw2

u2/Uw2

I/Lw

d/Dw

ľ/Lw′

d'/Dw'

I2/Lw2

d2/Dw2

y' (R' U' R' U' R') (U R U R)

y' (R' U R U') (R' U R)



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





y' (R' U' R U) (R' U' R)





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



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



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





Solved Pair



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

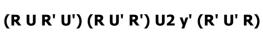


(R U R' U') (R U R' U') (R U R')

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

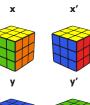
R2 U2 F R2 F' U2 R' U R'























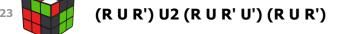










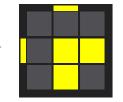




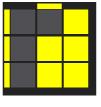


4-Look Last Layer ^ = more than one case number

2-Look OLL Orientation of Edges Edge orientation (EOLL)

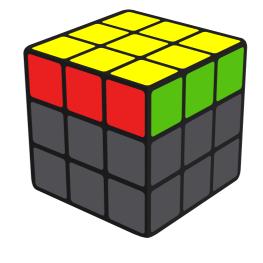


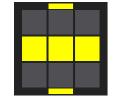
f (R U R' U') f'



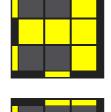
45

Aa

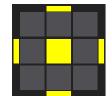




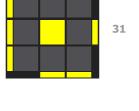
F (R U R' U') F'



2-Look PLL Corner Permutation



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



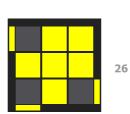
x (R' U R') D2 (R U' R') D2 R2

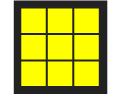


2-Look OLL Orientation of Corners

(R U R' U) R U2 R'







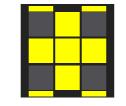
Solved

x' R U' R' D R U R' D' R U R' D R U' R' D' x

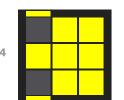


27

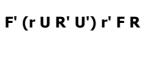
R U2 (R2 U') (R2 U') R2 U2 R



2-Look PLL Edge Permutation



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



Solved

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

F (R U R' U')*3 F'





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

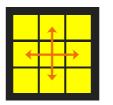




(R2 D R') U2 (R D' R') U2 R'



Н



M2 U M2 U2 M2 U M2

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

