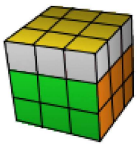
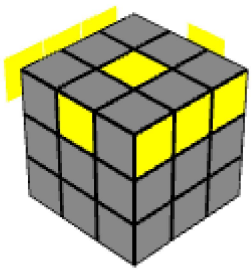
Previous step (/the-rubiks-cube/advanced-cfop-fridrich/first-two-layers-f2l/)

Next step (/the-rubiks-cube/advanced-cfop-fridrich/permutate-the-last-layer-pll/)

Step 3 - Orient last layer - OLL

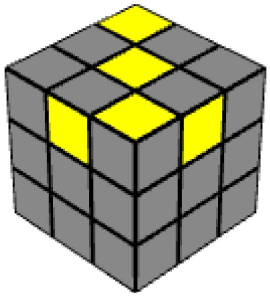


While solving the Rubik's Cube (/online-rubiks-cube-solver-program/) with the advanced Fridrich method (/the-rubiks-cube/advanced-cfop-fridrich/), when the first two layers (F2L) (/the-rubiks-cube/advanced-cfop-fridrich/first-two-layers-f2l/) are solved we need to orient the last layer (OLL) so the upper face of the Rubik's Cube (/the-rubiks-cube/) is all yellow. We don't care if the side colors don't match, we are going to permute the last layer (PLL) later (/the-rubiks-cube/advanced-cfop-fridrich/permutate-the-last-layer-pll/). Here are a few animated examples. Press the play to start the animation.



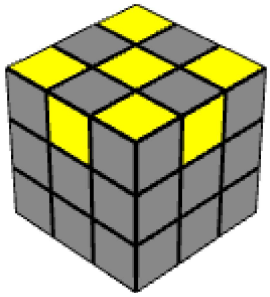
R U B' l U l2' x' U' R' F R F'

0/12



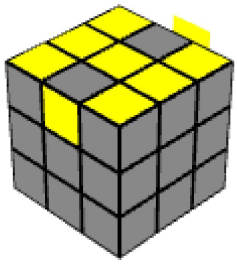
R U R' U R' F R F' U2 R' F R F'

0/13



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

0/11



L' R U R' U' L R' F R F'

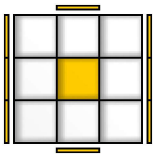
0/10

Privacy

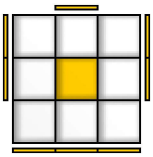
You'll need to learn all the 57 algorithms (/the-rubiks-cube/algorithm/) below to complete this in one step. If this seems too many I recommend you learn the 2look OLL which uses only 9 algorithms but of course it's slower.

Let's group them according to their look.

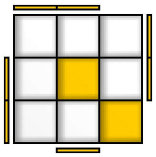
Dot



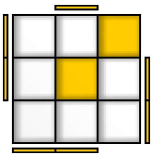
R U B' l U l2' x' U' R' F R F'



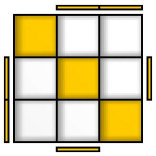
R' F R F' U2 R' F R y' R2 U2 R



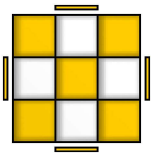
y L' R2 B R' B L U2' L' B M'



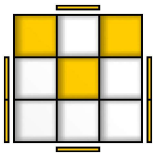
R' U2 x R' U R U' y R' U' R' U R' F



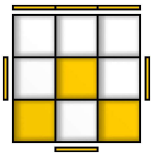
(R U R' U) R' F R F' U2 R' F R F'



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



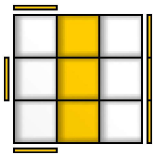
R' U2 F (R U R' U') y' R2 U2 x' R U



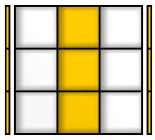
F (R U R' U) y' R' U2 (R' F R F')

Privacy

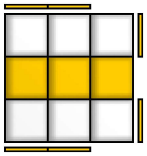
Line



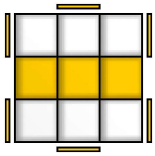
R' U' y L' U L' y' L F L' F R



R U' y R2 D R' U2 R D' R2 d R'

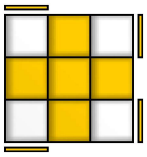


F U R U' R' U R U' R' F'

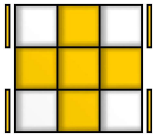


L' B' L U' R' U R U' R' U R L' B L

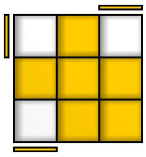
Cross



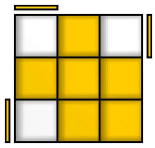
L U' R' U L' U (R U R' U) R



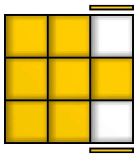
(R U R' U) R U' R' U R U2 R'



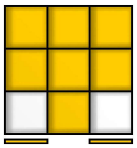
L' U R U' L U R'



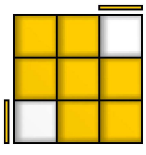
R' U2 (R U R' U) R



R' F' L F R F' L' F

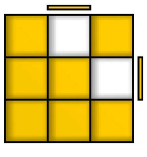


R2 D R' U2 R D' R' U2 R'

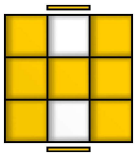


R' F' L' F R F' L F

4 corners



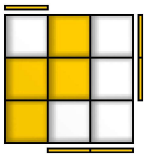
M' U' M U2' M' U' M



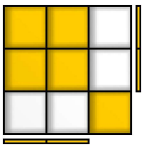
L' (R U R' U') L R' F R F'

Privacy

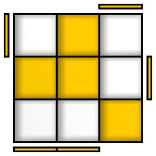
Shape _|



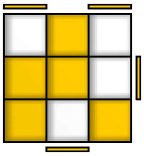
L F R' F R F2 L'



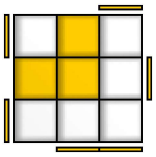
F R' F' R U R U' R'



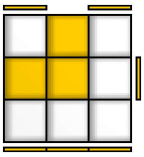
R' U' R y' x' R U' R' F R U R'



U' R U2' R' U' R U' R2 y' R' U' R U B

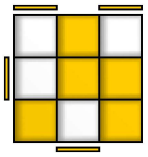


F (R U R' U') (R U R' U') F'

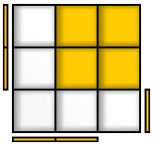


L F' L' F U2 L2 y' L F L' F

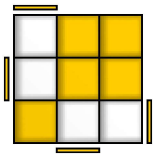
Shape |_



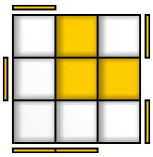
U' R' U2 (R U R' U) R2 y (R U R' U') F'



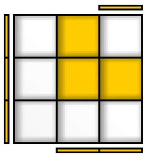
r U2 R' U' R U' r'



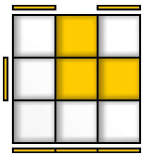
R' U2 l R U' R' U l' U2 R



F' L' U' L U L' U' L U F

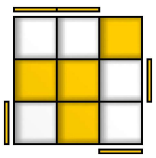


R' F R' F' R2 U2 x' U' R U R'

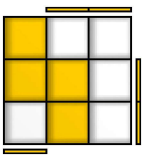


R' F R F' U2 R2 y R' F' R F'

Shape ¯|

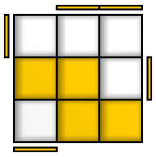


R U R' y R' F R U' R' F' R

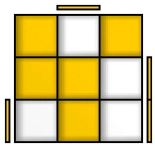


L' B' L U' R' U R L' B L

Privacy



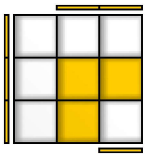
U2 r R2' U' R U' R' U2 R U' M



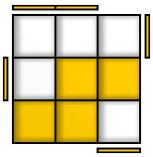
x' U' R U' R2' F x (R U R' U') R B2

Privacy

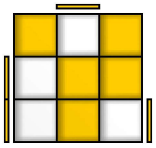
Shape |‾



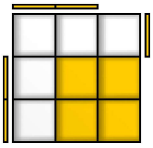
L U' y' R' U2' R' U R U' R U2 R d' L'



U2 l' L2 U L' U L U2 L' U M

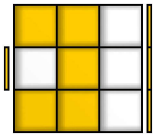


R2' U R' B' R U' R2' U l U l'

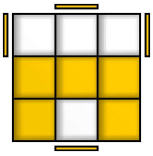


r' U2 (R U R' U) r

C

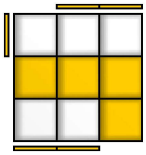


R U x' R U' R' U x U' R'

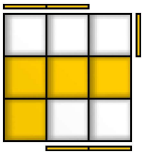


(R U R' U') x D' R' U R E'

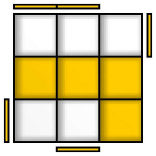
L



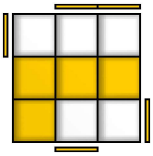
R' F R U R' F' R y L U' L'



L F' L' U' L F L' y' R' U R

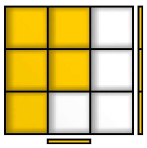


L' B' L R' U' R U L' B L

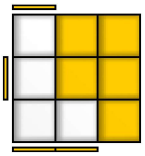


R B R' L U L' U' R B' R'

P



F U R U' R' F'



R' d' L d R U' R' F' R

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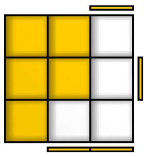
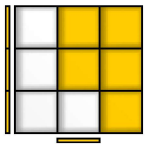
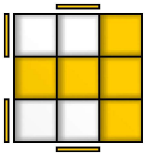


L d R' d' L' U L F L'

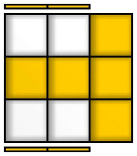


F' U' L' U L F

T

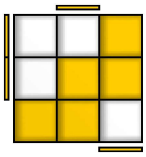


F (R U R' U') F'

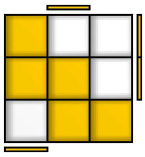


(R U R' U') R' F R F'

W

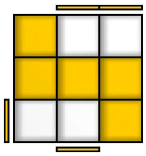


L U L' U L U' L' U' y2' R' F R F'

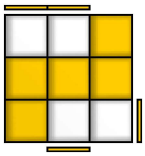


R' U' R U' R' U R U y F R' F' R

Z



R' F (R U R' U') y L' d R



L F' L' U' L U y' R d' L'

Previous step (/the-rubiks-cube/advanced-cfop-fridrich/first-two-layers-f2l/)

Next step (/the-rubiks-cube/advanced-cfop-fridrich/permutate-the-last-layer-pll/)

Steps of the Fridrich Rubik's Cube Method (/the-rubiks-cube/advanced-cfop-fridrich/):

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1. **White cross (/the-rubiks-cube/advanced-cfop-fridrich/white-cross/)**

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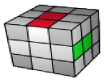

2. First two layers (F2L) (/the-rubiks-cube/advanced-cfop-fridrich/first-two-layers-f2l/)

3. Orient last layer (OLL) (/the-rubiks-cube/advanced-cfop-fridrich/orient-the-last-layer-oll/)

4. Permute last layer (PLL) (/the-rubiks-cube/advanced-cfop-fridrich/permutate-the-last-layer-pll/)

Comments

Privacy