Basic Square-1 Algorithms

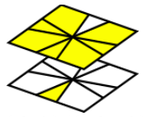
Arranged by Andy Klise of http://www.kungfoomanchu.com

Orient Corners

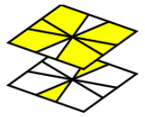
(1,0)/(3,0)/(-1,0)

(1,0)/(-1,0)

Orient Edges

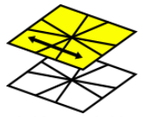


(0,-1)/(-3,0)/(4,1)/(-4,-1)/(3,0)/(0,-1)

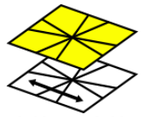


(0,-1)/(1,1)/(-1,0)

Permute Corners

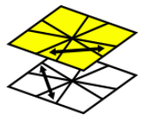


/(3,-3)/(3,0)/(-3,0)/(0,3)/(-3,0)/
or
/(3,-3)/(-3,0)/(0,3)/(0,-3)/(0,3)/

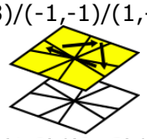


/(3,-3)/(0,3)/(-3,0)/(3,0)/(-3,0)/

Permute Edges



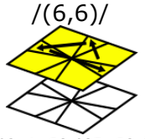
(1,0)/(0,3)/(-1,-1)/(1,-2)/(-1,0)



/(3,0)/(1,0)/(0,-3)/(-1,0)/
(-3,0)/(1,0)/(0,3)/(-1,0)

Flip bottom and top layers so that you don't have to memorize any algs for the bottom layer

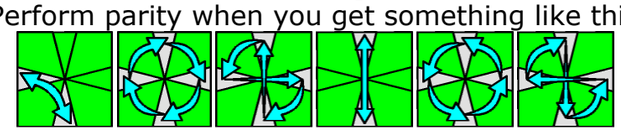
/(6,6)/

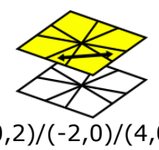


(1,0)/(0,-3)/(-1,0)/(3,0)/(1,0)/(0,3)/
(-1,0)/(-3,0)/

Parity

Perform parity when you get something like this





/(-3,0)/(0,3)/(0,-3)/(0,3)/(2,0)/(0,2)/(-2,0)/(4,0)/(0,-2)/(0,2)/(-1,4)/(0,-3)/(0,3)

Special Moves

(1,0)/(6,6)/(-1,0)

/(6,0)/(6,0)/(6,0)

/(6,0)/(0,6)/(-1,-5)

Advanced Square-1 Algorithms

Use these in addition to the Basic Algorithms

Orient Corners

(1,0)/(3,3)/(-1,0)

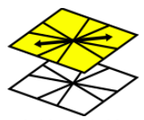
(1,0)/(0,3)/(0,3)/(-1,0)

(1,0)/(3,0)/(3,0)/(-1,0)

Orient Edges

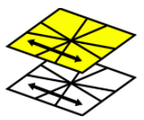
(1,0)/(-3,0)/(-1,-1)/(4,1)/(-1,0)

Permute Corners

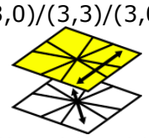


/(3,3)/(3,0)/(3,3)/(3,0)/(3,3)/

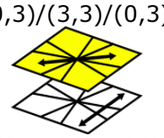
/(3,3)/(0,3)/(3,3)/(0,3)/(3,3)/



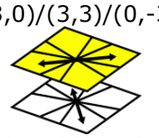
/(-3,0)/(3,3)/(0,-3)/



/(0,3)/(0,-3)/(0,3)/(0,-3)/

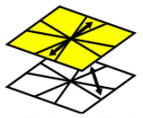


/(3,0)/(-3,0)/(3,0)/(-3,0)/

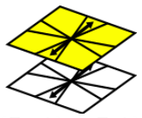


/(3,-3)/(3,-3)/

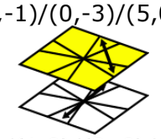
Permute Edges



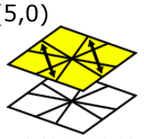
(1,0)/(0,-1)/(0,-3)/(5,0)/(-5,0)/(0,3)/(0,1)/(5,0)



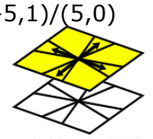
(1,0)/(5,-1)/(-5,1)/(5,0)



(0,-1)/(1,0)/(3, 0)/(0,-5)/
(0,5)/(-3, 0)/(-1, 0)/(0, -5)



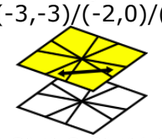
(1,0)/(-1,-1)/(-3,0)/(1,1)/(3,0)/
(-1,-1)/(0,1)



(1,0)/(-1,-1)/(-3,0)/(1,1)/(6,0)/
(-1,-1)/(-3, 0)/(1,1)/(-1,0)

Parity

/(3,3)/(1,0)/(-2,-2)/(2,0)/(2,2)/(-1,0)/(-3,-3)/(-2,0)/(3,3)/(3,0)/(-1,-1)/(-3,0)/(1,1)/(-4,-3)



/(-3,0)/(0,3)/(0,-3)/(0,3)/(2,0)/(0,2)/(-2,0)/(4,0)/(0,-2)/(0,2)/(-1,4)/(0,-3)/(0,3)

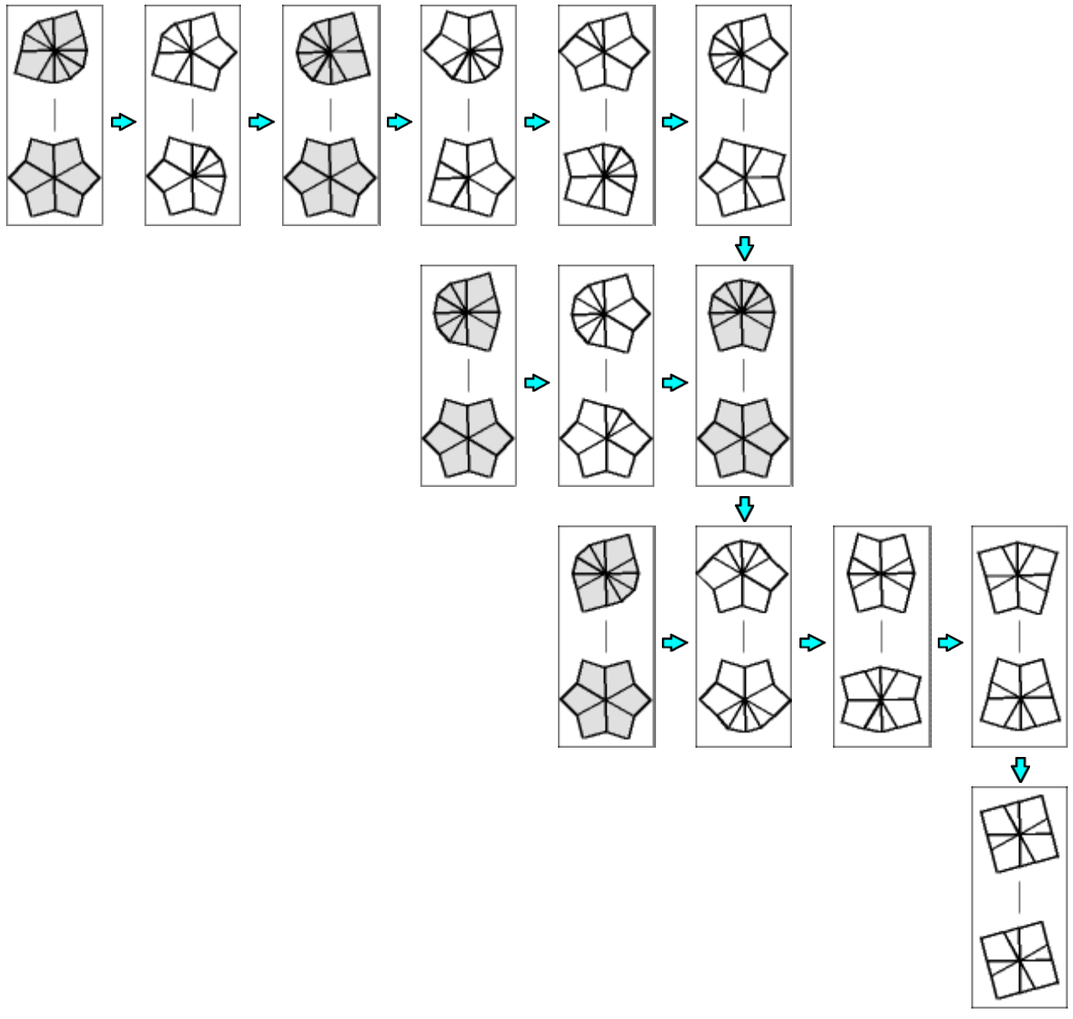
Credits

Weston - http://www.youtube.com/watch?v=6iPhuY-KvzE
Lars Vandenbergh - http://www.cubezone.be/square1step5.html
Dan Cohen and whoever it was that made the odd shape pictures

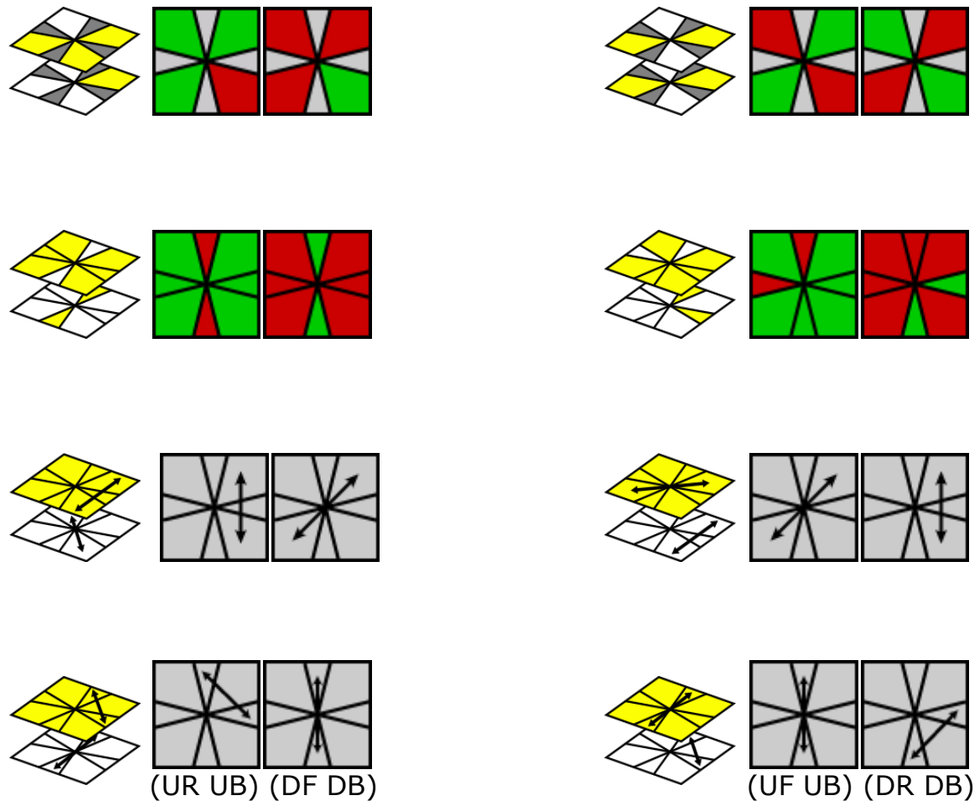
For more guides just like this, visit my website –
http://www.kungfoomanchu.com/

Getting the Square-1 into a Cube

Step I: Get the puzzle into 3 distinct layers
Step II: Fill one layer with 6 large wedges
Step III: Transform the puzzle into a cube
Step IV: Orient Corners then Orient Edges
Step V: Permute Corners then Orient Edges
Step VI: Fix Parity and do Special Moves



Notation



Notation

Top layer 30° (1/12 turn) **CW** *Note: a small wedge is 30° wide*	(1,0)
Top layer 60° (1/6 turn) **CW** *Note: a large wedge is 60° wide*	(2,0)
Top layer 90° (1/4 turn) **CW**	(3,0)
Top layer 180° (half-way around)	(6,0)
Top layer 90° (1/4 turn) **CCW**	(-3,0)
Top layer 60° (1/6 turn) **CCW**	(-2,0)
Top layer 30° (1/12 turn) **CCW**	(-1,0)
Rotate the entire **RIGHT SIDE 180°**	)(
Bottom layer 30° (1/12 turn) **CW**	(0,1)
Bottom layer 60° (1/6 turn) **CW**	(0,2)
Bottom layer 90° (1/4 turn) **CW**	(0,3)
Bottom layer 180° (half-way around)	(0,6)
Bottom layer 90° (1/4 turn) **CCW**	(0,-3)
Bottom layer 60° (1/6 turn) **CCW**	(0,-2)
Bottom layer 30° (1/12 turn) **CCW**	(0,-1)