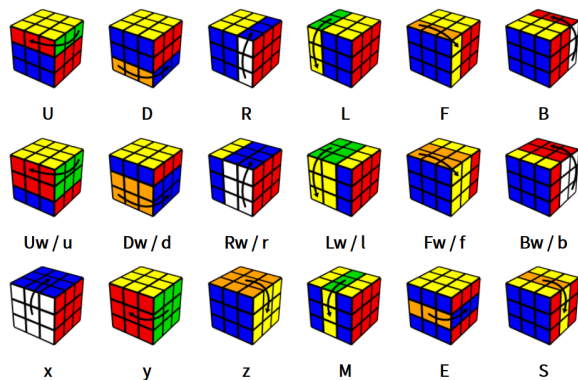# Rubik's Cheatsheet

2020-03-17

1 Notation

Figure 1: Each notation corresponds to a clockwise turn if you were looking at the face. `M`, `E`, and `S` follow the face that they are closest alphabetically to. A prime (`'`) mark indicates an opposite rotation.

2 Beginner Method

1. Top cross
2. Top corners
3. 2nd row middles
4. Bottom corners
5. Bottom middles

A good resource for scrambles and timing is `https://cstimer.net/`.

2.1 Algorithms

These algorithms are written with white side up (assuming you used white as your "top"). Also, these algorithm names are just arbitrarily chosen by me and are not standard.

Right	`D' R' D R D F D' F'`
Left	`D L D' L' D' F' D F`
CornerRotate	`R' D' R D' R' D2 R D2`
CornerSwap	`R' D' R F D F' R' D R D2`
TwoTowers	`F L B' L' F' B D B D' B'`
CycleBreak	`M D' M' D2 M D' M'`

3 Roux Method

One of the faster methods that is appealing due to it having a low average move count, being highly intuitive (thus requiring very few algorithms), and not needing reorientations. Other popular methods are CFOP (most current world records are set using this) and ZZ. Check `https://www.reddit.com/r/Cubers/wiki/best_methods` for a more detailed comparison.

1. Left block of 6
2. Right block of 6
3. Top corners
4. Top colors (arrow)
5. Complete left and right faces
6. Complete `M` slice

3.1 Algorithms

These algorithms are written with yellow side up. Yellow side up is often used for speed-cubing because you can more easily use your fingers to turn the cube quickly.

Sune	`R U R' U R U2 R'`
J-Perm	`R U R' F' R U R' U' R' F R2 U' R'`