badmephisto's Speedcubing Guide
Arranged by Andy Klise of kungfoomanchu.com

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; F2L should be solved intuitively.

Easy Cases (1-4)
- U (R U' R') if no U face edges are oriented properly on final slot
- y' U' (R' U R)
- Note – this image is blue and red because a cube rotation is required

Reposition Edge (5-8)
- (U' R U R') U^2 (R U' R')
- d (R' U R U') (R' U R')
- y' U' (L U') d' (L' U' L)
- U' (R U R U')(R U U')

Reposition Edge and Flip Corner (9-14)
- d (R' U R U')(R' U R')
- y' U' (L U') d' (L' U' L)
- U' (R U R U')(R U U')
- y' U (R' U R U')(R' U R')
- d (R' U R U')(R' U R')
- y' U (R' U R U')(R' U R')

Split Pair by Going Over (15-18)
- y' (R' U R U') d' (R U R')
- y (L U L)' U^2 y (R U R')
- (R U R U') U^2 (R' U R')
- y' U' (L U' L) U^2 (L' U' L)

Pair Made on Side (19-22)
- U (R U' R') U (R U' R')
- y' U' (R' U^2 R) U' (R' U R)
- U^2 (R U R) (R U R')
- y' U^2 (R' U R' U')(R' U R')

Weird (23-24)
- (R U R U') U' (R U' R' U')(R U R')
- y' (R U R U') U (R U R U')(R' U' R)
- y' U^2 (R' U R U')(R U R')
- y' U R U^2 (R U R U')(R U R')

Corner in Place, Edge in U Face (25-30)
- d' (L' U L) d (R U' R')
- y U' (L U' L) U (F U F')
- U' (R U R) U' (F U F')
- U (R U R) d' (L' U L)

Edge in Place, Corner in U face (31-36)
- (R U' R') d (R' U R)
- (R U' U)(F' U F)
- Solved Pair
- (R U R U')(R U R U')(R U R')

Edge and Corner in Place (37-42)
- d (R U R U')(R U R U')(R U R')
- y' R' U R' U'(R U R')
- y' R' U R' U'(R U R')
- y (L' U L U)(L' U L) U^2 (F U F')

Credits
badmephisto - http://www.badmephisto.com
Andy Klise - http://www.kungfoomanchu.com
Josef Jelinek - http://software.rubikscube.info/icube/
And everyone else

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Orient Last Layer (Two Look)

Step 1

1. \((R U R' U') F\)  
   - Probability = 1/6

Bonus

2. \(F (R U R' U') F'\)  
   - Probability = 1/4

Move to Second Look

3. \(F (R U R' U') F'\)  
   - Probability = 1/6

Orient Last Layer (Two Look)

Step 2

All Edges Oriented Correctly

4. \((R U R' U') R R'\)  
   - Probability = 4/27

5. \(R U R' U R U R'\)  
   - Probability = 4/27

6. \((R U R' U') R R'\)  
   - Probability = 4/27

7. \(F R U R' U R U R'\)  
   - Probability = 2/27

8. \(F (R U R' U') F'\)  
   - Probability = 4/27

9. \(F' R U R' U R U R'\)  
   - Probability = 4/27

10. \(R^2 (R U') R (R U') R\)  
    - Probability = 1/18

Swap One Set of Adjacent Corners

11. \((L U^2) (L U^2) (L F) (L' U L) (L F) L^2 U\)  
    - Probability = 1/18

12. \((R' U R' F) (R U R' U') (R' F) R^2 U'\)  
    - Probability = 1/18

13. \((R U' L) (U^2 R U' R U') (R L U')\)  
    - Probability = 1/18

14. \((R U R' F) (R U R' F) (R' U R' F) U\)  
    - Probability = 1/18

15. \((R U R' F) (R U R' F) (R U R' F) \)  
    - Probability = 1/18

16. \((R U R' F) (R U R' F) (R U R' F) \)  
    - Probability = 1/18

17. \((R U R' F) (R U R' F) (R U R' F) \)  
    - Probability = 1/18

18. \((R U R' F) (R U R' F) (R U R' F) \)  
    - Probability = 1/18

Swap One Set of Corners Diagonally

19. \((R U R' F) (R F) (R U R' U)(R U R R U)\)  
    - Probability = 1/18

20. \((R U R' F) (R U R' F) (R U R' F)\)  
    - Probability = 1/18

21. \((R U R' F) (R U R' F) (R U R' F)\)  
    - Probability = 1/18

22. \((R U R' F) (R U R' F) (R U R' F)\)  
    - Probability = 1/18

23. \((R U R' F) (R U R' F) (R U R' F)\)  
    - Probability = 1/18

24. \((R U R' F) (R U R' F) (R U R' F)\)  
    - Probability = 1/18

Double Spins

25. \(R^2 u R U R U R' u R' (y R' U R)\)  
    - Probability = 1/18

26. \(R^2 u R U R U R' u R' (y R' U R)\)  
    - Probability = 1/18

27. \(R^2 u R U R U R' u R' (y R' U R)\)  
    - Probability = 1/18

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### Orient Last Layer

**Red** = R U R' U' Family,  
**Green** = R U R' U Family,  
**Blue** = R' F R' F Family

Try to recognize each pattern by viewing the fewest number of faces

#### All Edges Oriented Correctly (OCCL1-OCCL8) (second part of three look last layer)

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Edges</th>
<th>Probability</th>
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#### Squares

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<tr>
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<td>(R U R' U) R U' R'</td>
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</tr>
<tr>
<td>(R U R' U) R U' R'</td>
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</tr>
<tr>
<td>(R U R' U) R U' R'</td>
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#### P-Shapes (P1-P4)

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#### W-Shapes (W1-W2)

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#### I Shapes (I1-I4)

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<td>(R U R' U) R U' R'</td>
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#### Knight Move Shapes (K1-K4)

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