EPLLs

Possible PLLs: H, Ua, Ub, Z

Category 0: Two 3x1 Blocks

I hope you can recognize this.
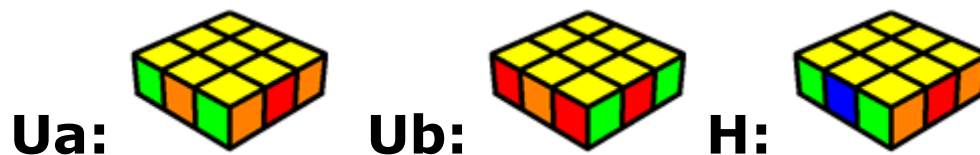
Category 1: One 3x1 Block

Ua: , **Ub:** ,
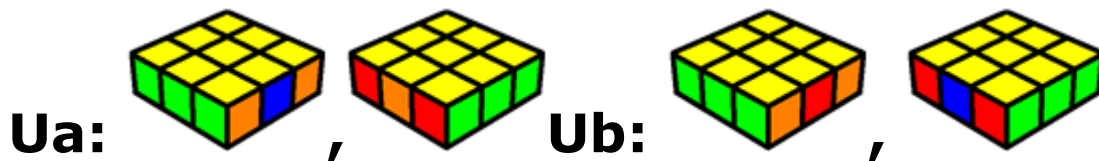
When the block is on the left:

-It's Ub when an opposite edge colour is on the right

-It's Ua when an adjacent edge colour is on the right

When the block is on the right:

-It's Ua when an opposite edge colour is on the left

-It's Ub when an adjacent edge colour is on the left

Category 2: No 3x1 Blocks & >1 Opposite Colour Edge

Ua: **Ub:** **H:**

-It's Ua when an opposite edge colour is on the right

-It's Ub when an opposite edge colour is on the left

-It's H when an opposite edge colour is on each side

Category 3: No 3x1 Blocks & No Opposite Colour Edge

Ua: **Ub:** **Z:** ,

When a single colour appears three times:

-It's Ua when the edge of that colour is on the right

-It's Ub when the edge of that colour is on the left
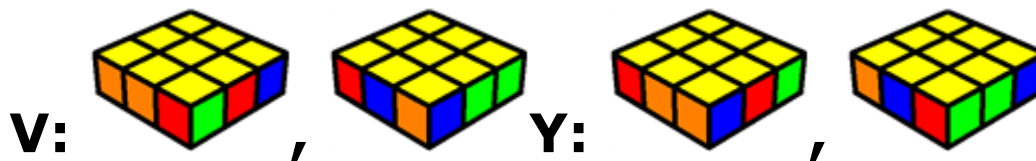
Otherwise:

-It's Z

Diagonal CP

Possible PLLs: E, Na, Nb, V, Y

Category 1: Two Blocks

V: **Y:** **Na:** **Nb:**

-It's V when the blocks are both on the inside

-It's Y when the blocks are both on the outside

-It's Na when the fully-visible corner is part of a left block

-It's Nb when the fully-visible corner is part of a right block

Category 2: One Block

V: , **Y:** ,

-It's V when there's a block on the outside

-It's Y when there's a block on the inside

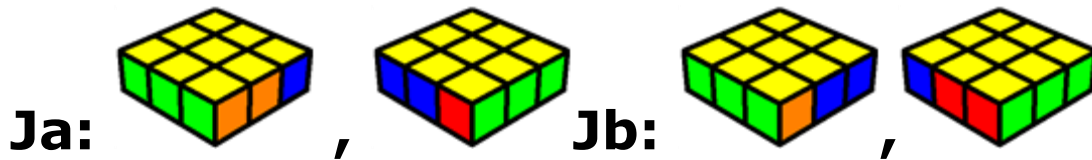## Category 3: No Blocks

V: **Y:** **E:** ,

-It's V when there's a checker pattern on the inside

-It's Y when there's a checker pattern on the outside

Adjacent CP – Two Blocks

Possible PLLs: Ja, Jb

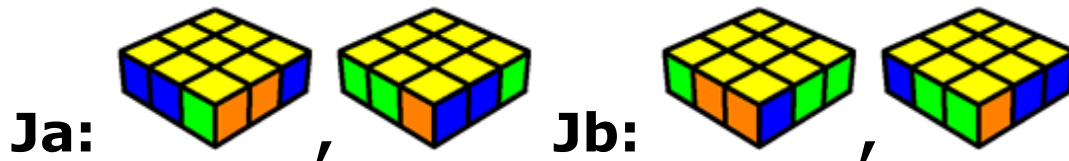## Category 1: A 3x1 Block & A 2x1 Block

Ja: , **Jb:** ,

When the 3x1 block is on the left:

-It's Ja when the 2x1 block is on the inside

-It's Jb when the 2x1 block is on the outside

When the 3x1 block is on the right:

-It's Jb when the 2x1 block is on the inside

-It's Ja when the 2x1 block is on the outside

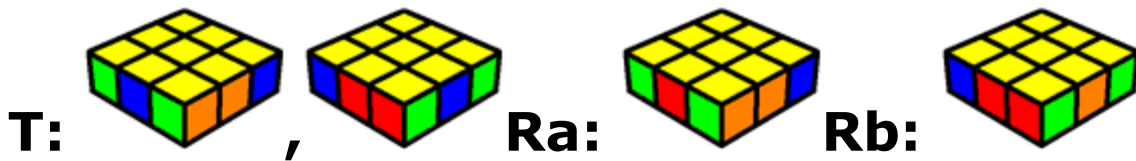## Category 2: Two 2x1x1 Blocks

Ja: , **Jb:** ,

-It's Ja when the 2x1 block on the outside is on the left

-It's Jb when the 2x1 block on the outside is on the right

Adjacent CP – Headlights, One Block

Possible PLLs: Aa, Ab, Ga, Gc

Category 1: Inner Block

T: , **Ra:** **Rb:**

When the edge in between the headlights is adjacent:

-It's Ra when the block is on the right

-It's Rb when the block is on the left

Otherwise:

-It's T

Category 2: Outer Block

Aa: **Ab:** **Ga:** **Gc:**

When only three unique colours are visible:

-It's Aa when the block is on the right

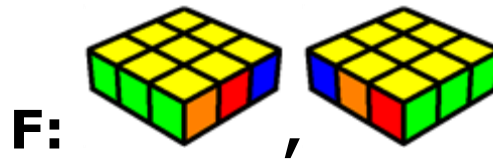-It's Ab when the block is on the left

Otherwise:

-It's Ga when the block is on the right

-It's Gb when the block is on the left

Adjacent CP – No Headlights, One Block

Possible PLLs: Gb, Gd, Aa, Ab, Ga, Gc Ra, Rb, T

Category 1: A 3x1 Block

F: ,

-It's F

Category 2: Two 2x1 Blocks

Aa: **Ab:**

-It's Aa when the outer corner on the right is opposite

-It's Ab when the outer corner on the left is opposite

Category 3: Inner Block

Ga: **Gc:**   **Gb:**   **Gd:**

When the corner beside the block is adjacent:
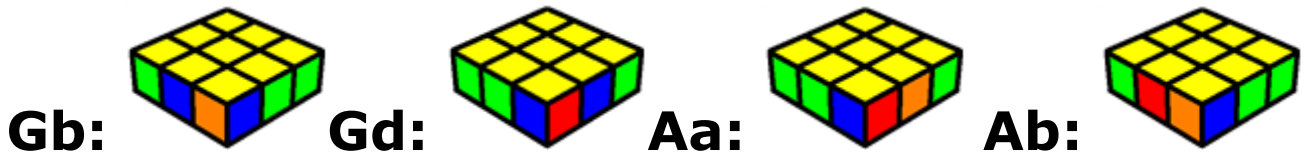
-It's Ga when the block is on the left

-It's Gc when the block is on the right

Otherwise:

-It's Gb when the block is on the left

-It's Gd when the block is on the right

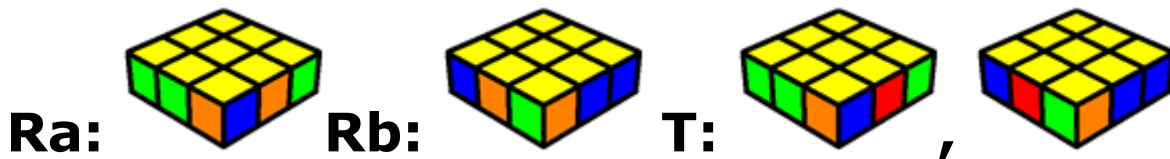# Category 4: Outer Block & Opposite Corner

Gb: **Gd:** **Aa:** **Ab:**

When only three unique colours are visible:

-It's Gb when the block is on the right

-It's Gd when the block is on the left

Otherwise:

-It's Aa when the block is on the left

-It's Ab when the block is on the right

Category 5: Outer Block & Adjacent Corner

Ra: **Rb:** **T:** ,

When only three unique colours are visible:

-It's Ra when the block is on the right

-It's Rb when the block is on the left

Otherwise:

-It's T

Adjacent CP – Headlights, No Blocks

Category 1: Opposite edge in between headlights

Gb: , **Gd**: ,

When only three unique colours are visible:

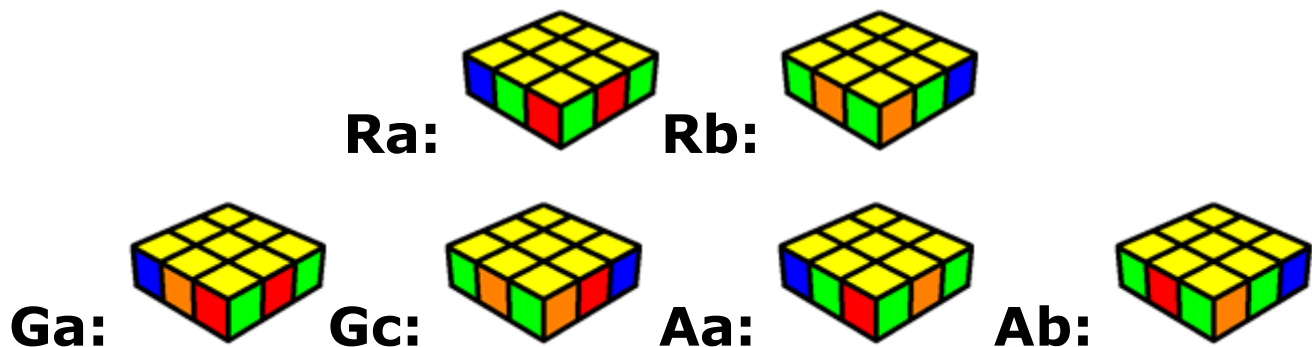-It's Gb when the block is on the left

-It's Gd when the block is on the right

Otherwise:

-It's Gb when the block is on the right

-It's Gd when the block is on the left

Category 2: Adjacent Edge in between headlights

Ra: **Rb:**

Ga: **Gc:** **Aa:** **Ab:**

When only three unique colours are visible:

-It's Ra when the headlights are on the left

-It's Rb when the headlights are on the right

Otherwise:

-It's Ga when the headlights are on the right and the outer left corner is adjacent

-It's Gc when the headlights are on the left and the outer right corner is adjacent

-It's Aa when the headlights are on the right and the outer left corner is opposite

-It's Ab when the headlights are on the left and the outer right corner is opposite

Adjacent CP – No Headlights, No Blocks

Possible PLLs: Ra, Rb, F, Ga, Gc

F: ,

Ga: **Gc:** **Ra:** **Rb:**
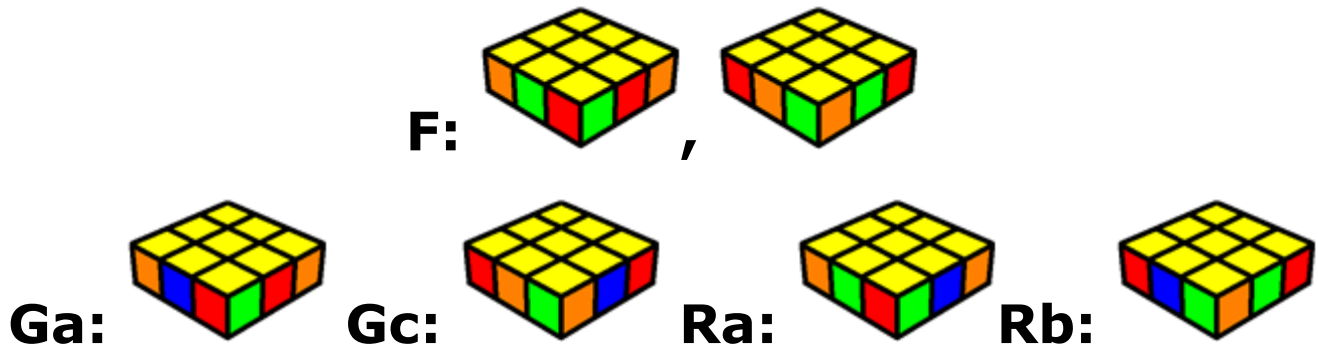
When only three unique colours are visible:

-It's F

Otherwise:

-It's Ga when an opposite outer corner is on the right

-It's Gc when an opposite outer corner is on the left

-It's Ra when an opposite inner corner is on the right

-It's Rb when an opposite innerr corner is on the left