Purpose: The goal of this lesson is to make the algorithms necessary to solve the final edge pieces of the Rubik’s Cube accessible to all elementary students through a chant.

Background: Before students are ready to solve this layer of the cube, they should be able to solve the white cross & corners, the middle layer, the yellow cross, the yellow top and yellow corners of the cube. Do not attempt to teach this lesson before students have mastered the prior layers and sequences.

Procedure: Have students prepare cubes by solving through the yellow top and yellow corner layers of the cube. Show students the steps of the stage 6 sequence. Have them find meaningful patterns. Notable patterns: Front, front happens on the first, middle, and final lines of this ‘poem’; top to the left is the 2nd and the 2nd from the bottom; left down, right down is toward the middle on either side of the middle stanza ‘front, front’.

The Final Moves Chant
(pat, clap, pat, clap)

Front, Front
Top to the Left (or right)
Left Down, Right Down
Front, Front
Left Up, Right Up
Top to the Left (or right)
Front, Front

See video for the rhythm of the chant.
Note that students will do top to the left (or right) move based on the direction those final edge pieces are going. Also, if the edge pieces are not all moving in the same direction around the cube, they may have to complete the sequence more than one time.

Video for this lesson:
https://vimeo.com/438376372