



4. Have students rotate the faces of their Cube correctly by following along with you as you model turning the Cube.
5. Have students repeat the algorithm 3-5 times.
6. Stop and discuss what is happening with the cube. Students should notice that some colors start to line up next to each other as they perform the algorithm.
7. Also discuss that the repeated movement in this algorithm is a pattern. This is one example of how patterns can be used to solve problems.
8. Have students design their own algorithm they can practice on the Cube. Do not be concerned about the solving of the Cube.
9. Emphasize to students that their *pattern unit* should have 4 movements (as seen above). Have students label and draw the arrows for their algorithm.
10. Allow students time to trade and practice their algorithms with a partner.

Notes to Teacher: For students who may have difficulty drawing and/or labeling the moves, you can provide them with a set of illustrated and labeled moves. Students can cut out the moves that they would like to use and arrange them into their *pattern unit*.

Pattern Moves:

