Rubik’s® Cube Turns Memory Game

Grade level: Gr K-5

Common Core Standards:
K.G.1 Describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
3.MD.1 Telling time

21st Century Skills: Critical Thinking and Problem Solving
- Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation
- Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems

Objectives: Students will be able to match the letter notation used to indicate turns on a Rubik’s Cube to its image.

Depending on the age of the students, they may:
- describe relative positions using the terms UP, DOWN, FRONT, BACK, LEFT and RIGHT
- identify clockwise and counterclockwise turns from the perspective of each of the relative positions listed above

Materials: a set of the cards provided here for every 1-4 students
scissors if cards are not pre-cut

Background Knowledge: Familiarity with an analog clock, a Ferris wheel, turning a doorknob, and opening a water bottle may be helpful.

Procedure: Cut out each playing card for the Rubik’s Cube and/or Rubik’s Mini. If you are using both cubes, make 2 copies of the letter cards.

Place the cards face down.

Each player turns over 2 cards. If the image card matches the letter notation, the player keeps the cards. If the cards do not match, the player turns the cards face down in the same positions. Matches must be one image and 1 letter card.

Players take turns trying to match the images with the correct letter cards.

The player with the most pairs wins.
Rubik's® Cube Turn Cards

- Bottle turn
- Bottle turn
- Bottle turn
- Bottle turn
- Door knob turn
- Door knob turn
- Door knob turn
- Door knob turn
- Ferris wheel turn
- Ferris wheel turn
- Ferris wheel turn
- Ferris wheel turn
<table>
<thead>
<tr>
<th>Bottle Turn</th>
<th>Bottle Turn</th>
<th>Bottle Turn</th>
<th>Bottle Turn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doorknob Turn</td>
<td>Doorknob Turn</td>
<td>Doorknob Turn</td>
<td>Doorknob Turn</td>
</tr>
<tr>
<td>Ferris Wheel Turn</td>
<td>Ferris Wheel Turn</td>
<td>Ferris Wheel Turn</td>
<td>Ferris Wheel Turn</td>
</tr>
</tbody>
</table>
Make 2 copies of this page. The letter cards are the same for Rubik’s Cube turns and for Rubik’s Mini turns.