

Trigon Flip

Puzzle Design Document

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Puzzle Type and Operation

Puzzle Type: Combination sequential movement and tiling puzzle

Operation: The puzzle is a square wood board consisting of 28 triangular pieces, each white on one side and black on the other. Players flip the pieces on the board to create specific patterns.

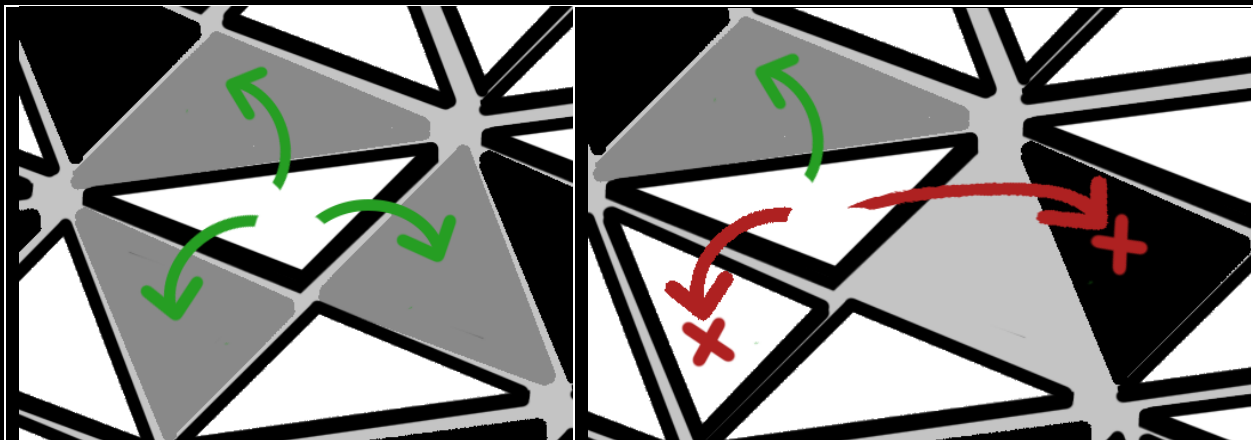
Rules and Objective

The objective of Trigon Flip is to have the colour and positions of the triangles on your board match the picture on the reference card.

Rules:

- The puzzle takes place on a 4x4 grid with 28 triangular tiles. There are 4 reference cards.
- To start the game the player places the tiles on the board in the start positions indicated on their chosen reference card.
- Tiles are moved by flipping them along one of their three edges into an adjacent empty space.
- Tiles cannot be picked up or removed from the board, overlap, or occupy the same space.

Example moves:



Target Audience

The target audience for trigon flip is anyone over the age of 35. The game targets players who are looking for a more thoughtful and relaxing gameplay experience and who have the time to sit and think the puzzle through.

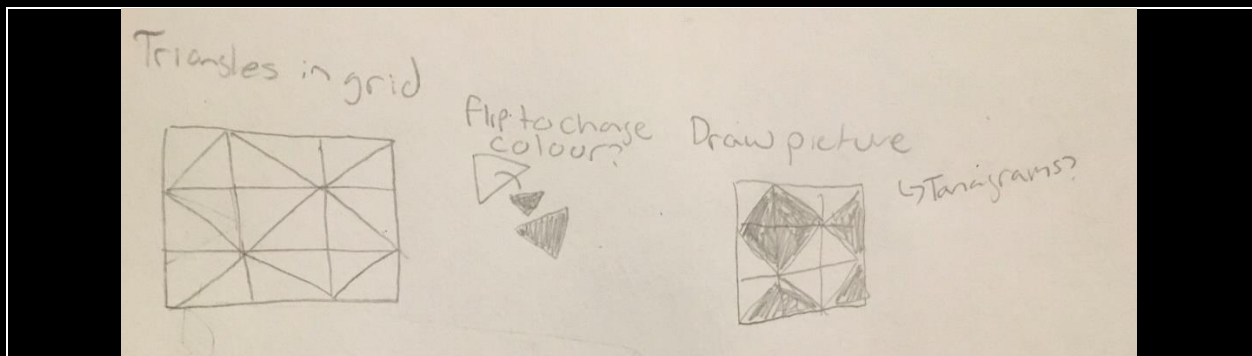
Win/Lose States

The game is won once the pattern of the tiles in the game board matches the pattern on the flash card.

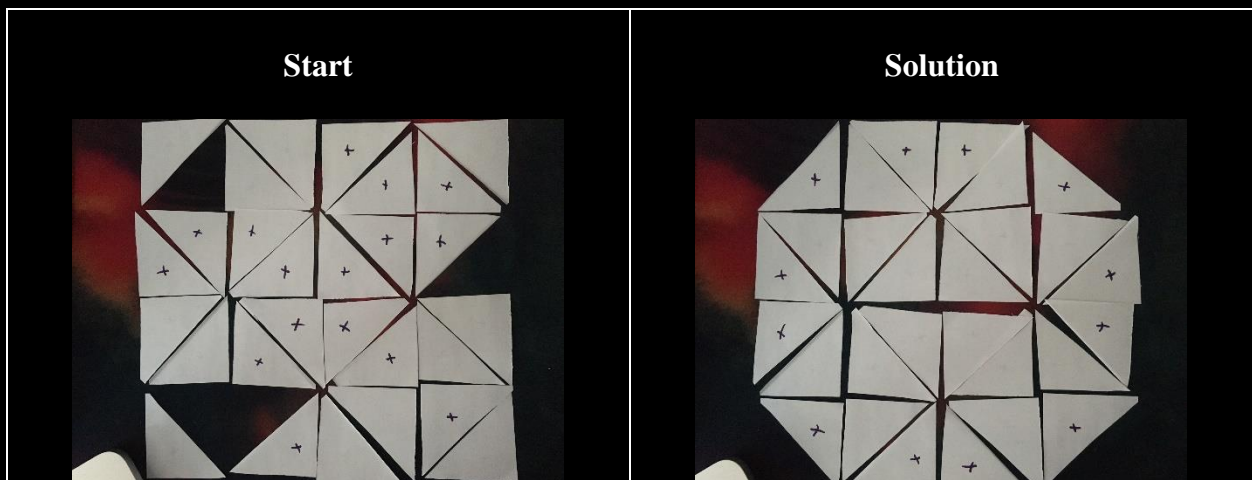
The game is lost if the player cannot match the pattern. Similar to a Rubik's Cube there is no possible state where the game cannot be won if the game rules were followed.

Sketches and Photos

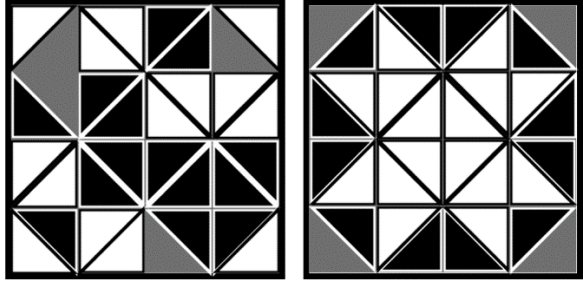
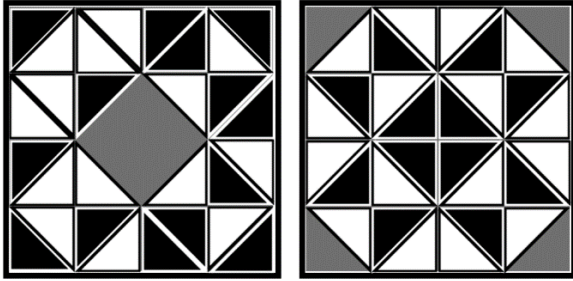
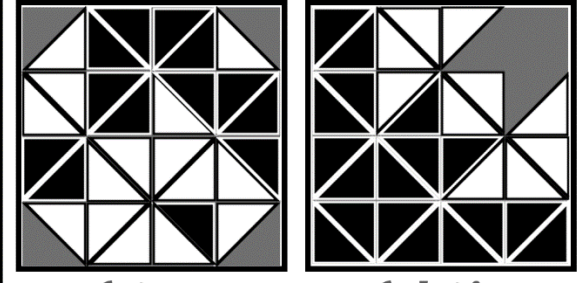
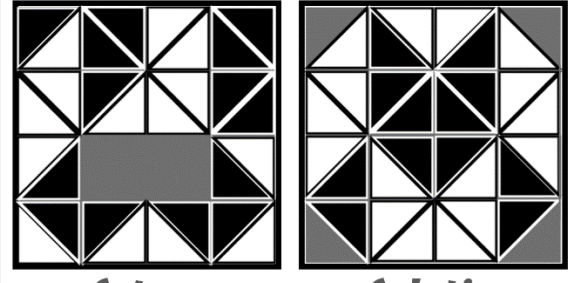
Initial Concept



Paper Prototype





Puzzle Cards

<p>#1: Flower</p>  <p><i>Setup</i> <i>Solution</i></p>	<p>#2: Sun</p>  <p><i>Setup</i> <i>Solution</i></p>
<p>#3: The Bat</p>  <p><i>Setup</i> <i>Solution</i></p>	<p>#4: Owl</p>  <p><i>Setup</i> <i>Solution</i></p>

Physical Prototype

Footage: <https://youtu.be/ZQQWiIhxj34>

<p>Setup</p> 	<p>Solution</p> 
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