

## BLOXORZ

### 1. Basic game info

- Number of players

Single player

- Time to play

5 minutes and up

- Suggested ages

8 and up

- Description (goal and core mechanic in first line)

Bloxorz is a game in which players tumble a rectangular block through the maze of square tiles so that the last tumble will slide the block through a single square hole at the end of every stage.

There are 33 stages to complete. Players solve the challenge in each stage by using a series of bridge-opening switches, teleporters, and block-splitting switches.

- Genre/ Platform

Puzzle/ Web

- Links to forums, reviews, pictures

<http://jayisgames.com/archives/2007/06/bloxorz.php>

### 2. What is the core learning activity of the game?

Players learn how to navigate a rectangular block through a maze so it slides correctly into the square hole.

### 3. What integrated domains does this game align with? What pedagogy does it suggest?

Integrated domain - 'Design and Systems'

Pedagogy - 'Games as simulations: MANIPULATING

## SYSTEMS'

4. Does this game have a level editor?

No.

5. What kinds of social interaction does this game create? What are the qualities of that interaction?

This is a single player game hence no social interaction. Players can help each other solve the puzzles.

6. What are the 6<sup>th</sup> grade math curriculum standards that this game aligns with? (include full path)

➤ Problem Solving

- Students will build new mathematical knowledge through problem solving.
  - Students interpret information correctly, identify the problem, and generate possible strategies and solutions.
- Students will apply and adapt a variety of appropriate strategies to solve problems.
  - Students translate from a picture/ diagram to a number or symbolic expression.
  - Students use trial and error and the process of elimination to solve problems.
- Students will monitor and reflect on the process of mathematical problem solving.
  - Students differentiate between valid and invalid approaches.
  - Students explain the methods and reasoning behind the problem solving strategies used.

*(e.g. Students may first map out possible routes for moving the block based on squares on the grid and length and width of the block such that the last move slides it into the square hole. Next step could be to then determine what would have been the shortest route)*

- Reasoning and Proof
- Communications
- Geometry

7. Is the game simulating or modeling something? (real scenario, imagined scenario, predictive scenario, system)

*This game is simulating a spatial mathematical system.*

8. What are the data sets that can be gathered through play of this game?

- *Number of moves to slide rectangular block into the hole*

9. How can these data sets be analyzed and manipulated?

- **Maze quest:** goal is to find your way through a space [about navigation]

*(e.g. players can play a particular stage a number of times to find more than one solution and determine best solution with reasons why)*

- **Tracking quest:** goal is to track [x] and report back on its movement or change

*(e.g. a player can be asked to observe another players moves)*

10. Tags

*math, puzzle, maze, navigation, spatial*