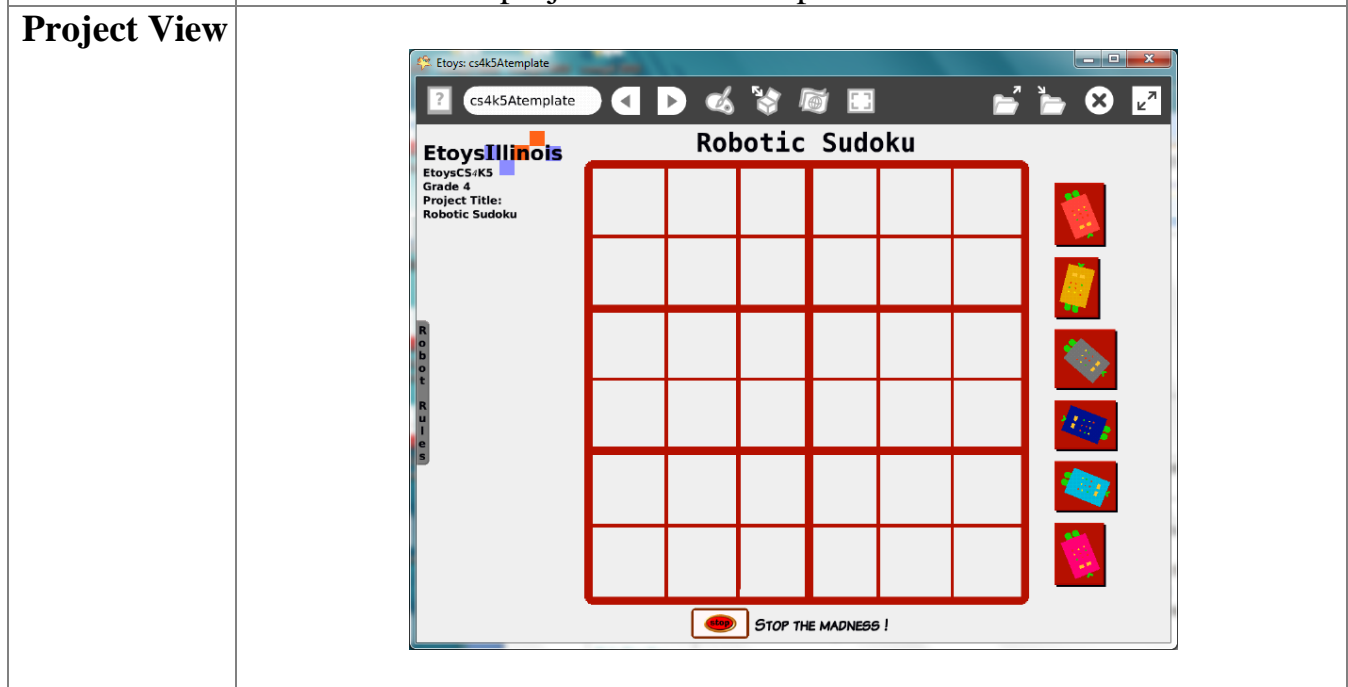


**EtoysIllinois**  
 EtoysCS4K5  
**Grade 4**  
**Robotic Sudoku**

**Description:** Students will:  
 Draw a grid using paint tools.  
 Divide it into six areas.  
 Draw 1 motif and write a script for it.  
 Make five copies of the scripted motif.  
 Repaint each of the copies.  
 Put the moving motifs on Maker Buttons.  
 Add a flap with Sudoku rules.  
 Make the whole project in one class period.



**Etoys Quick Guides** Click the question mark in Etoys to open the set of interactive tutorials for basic tools and techniques.

**Vocabulary:** Planning ahead, grid, half, quarter, rows, columns, estimate, solve, patterns, rules,

**Lesson 1:** Give students information about this project in advance and ask them to plan ahead. Theme, designs, colors, and scripts.

Plan ahead and the project can be made in 40 minutes.

Paints: Straight:

<p>Line Tools</p> <p>Paints: Brushes</p> <p>Script Tiles: Tests</p> <p>Halo Handles: Size, Color, Copy</p> <p>Object Catalog: Maker Buttons</p> <p>Supplies: Text</p> <p>Supplies: Add a Flap</p> <p>Navigator Bar: Keep Find Projects</p>	<p>Draw the square and estimate the distances for the grid lines.          Draw a design motif.</p> <p>Make a script for it that makes it move and add a test statement that keeps in inside the small squares.</p> <p>Make five copies and change the colors.</p> <p>Get six Maker Buttons from Supplies and put a design motif on each.</p> <p>Use Text from Supplies and type a title and rules.</p> <p>Add a flap for the rules and solutions.</p> <p>Keep the project: NameSudoku; i.e. KateRoboticSudoku</p>
<p><b>Standards:</b></p>	<p>Common Core Standards          Mathematics: 4.G.1.3</p> <p>Bloom’s Taxonomy/Cognitive Domain:          Knowledge: knows          Application: uses</p> <p>NETS</p> <ol style="list-style-type: none"> <li>1. a</li> <li>3. b</li> <li>4. b</li> </ol>
<p><b>Resources:</b></p>	<p>Etoys Help Quick Guides: always available in Etoys. Open Etoys and click the question mark to open a set of interactive tutorials of basic tools and techniques.</p> <p><a href="http://www.etoysillinois.org">www.etoysillinois.org</a> projects, lesson plans, software download</p> <p><a href="http://www.mste.Illinois.org">www.mste.Illinois.org</a> more math, science, and technology resources</p> <p><a href="http://www.corestandards.org">www.corestandards.org</a> Common Core Standards</p> <p><a href="http://www.squeakland.org">www.squeakland.org</a> software and Etoys projects</p> <p><a href="http://www.nctm.org">www.nctm.org</a> Standards and Focal Points for each grade level</p>
<p>kh January 2011</p>	

Etoys Computer Science for Kindergarten to Fifth Grade  
Pathways to Programming  
EtoysCS4K5  
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