


EtoysIllinois
 EtoysCS4K5
Grade Kindergarten
Designs in Motion

Description:	<p>Students will:</p> <p>Paint a design motif.</p> <p>Create scripts that make the design move forward, turn and bounce.</p> <p>Experiment with the numbers in the scripts.</p> <p>Make patterns with that design and another one; use scripts to control their motion and location on the screen.</p>
Project View	 <p>The screenshot shows the Etoys project view window. The title bar reads 'Etoys: cs4k5gkdesigns in motion'. The window has a toolbar with various icons. The main canvas is orange and displays a design motif consisting of a yellow circle, a green 'K' shape, a red horizontal bar, and a small blue square. In the bottom right corner, there are two script tiles. The first script is 'shapes go' followed by a 'paused' button and a 'shapes forward by 5' tile. The second script is 'shapes turn' followed by a 'paused' button and a 'shapes turn by 5' tile.</p>
Subject:	Math, Art
Etoys Quick Guides	Click the question mark in Etoys to open the set of interactive tutorials for basic tools and techniques.
Vocabulary:	Forward, turn, halo of handles, Viewer, script tiles, top, bottom, left, right, middle, in the top half, in the lower half.
Lesson 1: Paint Tools Brushes	<p>This project introduces several tools, techniques and concepts. Give students time to develop their knowledge and skill. Thorough learning and experiments are the valuable aspects of this project.</p> <p>Ask students to draw a design: one thing, no bigger than their hand and click Keep.</p>

<p>Halo Handles: Viewer</p> <p>Script Tiles: Forward by</p> <p>Script Tiles: Turn by</p>	<p>Pick up the drawing and put it: high in the window, low, to the left, right, middle, etc.</p> <p>Open a Viewer and make a script with a forward by tile. Click the clock to start and stop it. Experiment with the numbers. Ask them to explain the motion when the number is less than five, more than five, and zero.</p> <p>Make a script with a turn by tile. Give students time to experiment.</p> <p>Ask if they can make their design go to the top, bottom, right side, and left side of the screen by using their two scripts.</p>
<p>Lesson 2:</p>	<p>Give students time to paint a design and create a script with forward, turn, and bounce tiles. Use a new paint palette to paint another design. And make a script for it. Students could make many designs and scripts in the same project and make them all move or stop.</p> <p>Students can copies of their designs and then make patterns such as ABA, AABB.</p>
<p>Standards:</p>	<p>Common Core Standards Mathematics: K.G.1,2,5,6</p> <p>Bloom's Taxonomy/Cognitive Domain: Knowledge: describes, knows, names, selects, states Application: demonstrates, produces, uses</p> <p>NETS 1. a, b, c 2. a, b 4. a, b, c, d</p>
<p>Resources:</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>www.EtoysIllinois.org projects, lesson plans, software download www.MSTE.Illinois.org math, science, and technology resources www.corestandards.org Common Core Standards www.Squeakland.org software and Etoys projects www.nctm.org Standards and Focal Points for each grade level</p>
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