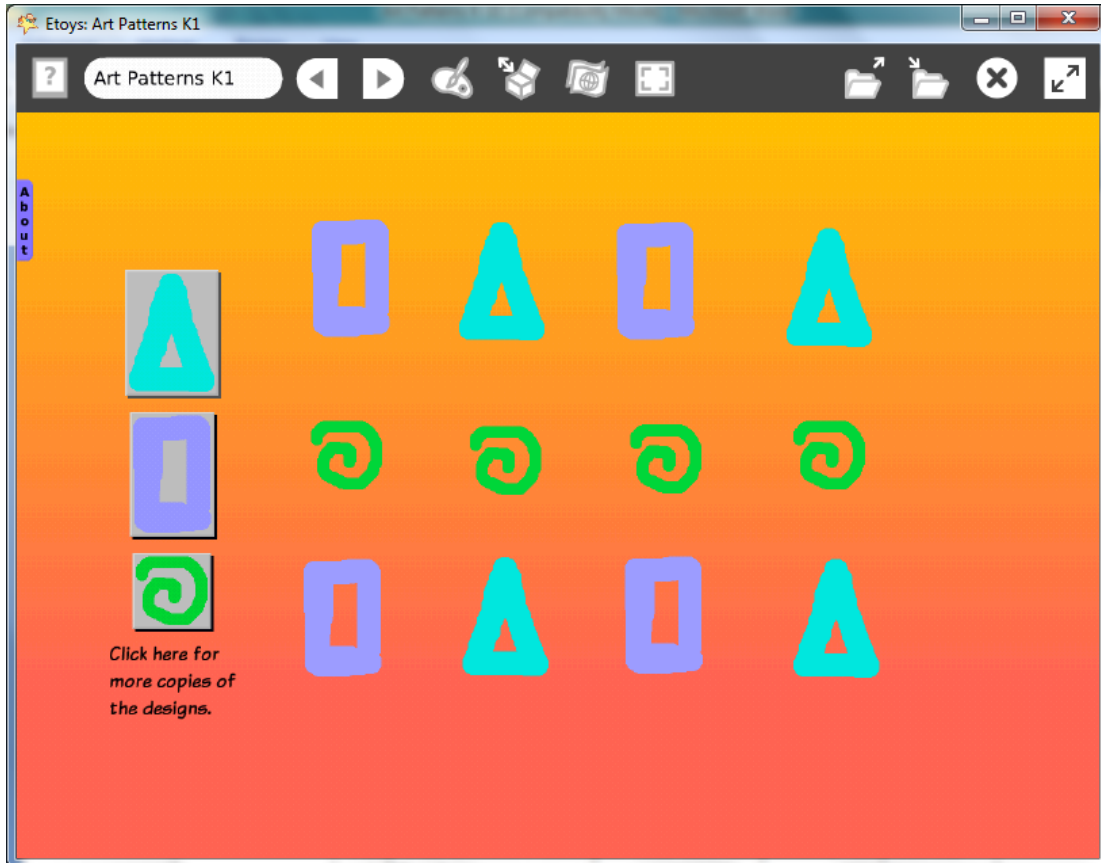


**Art**  
**Etoys-Patterns-Still-Patterns-Etoys**  
**Kindergarten – First Grade Levels**



<b>Introduction:</b>	Students use Etoys as a canvas to create beautiful patterns. The technology makes it easy to try many ideas, to experiment with changes, and to save patterns and designs the artist wants to remember and enjoy.
<b>Topic:</b>	Students draw simple shapes and use them to create complex patterns. Students become familiar with four elements of art: line, shape, scale, and color. The lessons use a vocabulary of words common in art, mathematics, and everyday experience.
<b>Subject:</b>	Art
<b>Time:</b>	Lesson 1 two or more labs Lesson 2 two or more labs

<p><b>Description:</b></p>	<p>Students will use the Etoys paint tools to make designs and patterns with shapes and colors. They will experiment with color and the location of elements on the screen.</p> <p>They will describe their patterns and the patterns they see on neighboring screens.</p> <p>Technology lets students make changes easily.</p>
<p><b>Vocabulary:</b></p>	<p>symmetry, asymmetry, symmetrical, asymmetrical, warm colors, cool colors, line, shape, triangle, square, circle, rectangle, contrast, background, size, large, medium, small, counting, pattern, duplicate, copy, set, sequence, above, below, beside, before, left, right, upper, lower, edge, near, up, down, between, almost, add, subtract, equals, exactly</p>
<p><b>Evaluation Criteria:</b></p>	<p>Creates symmetrical pattern and asymmetrical patterns.          Can change an asymmetrical pattern to one with symmetry.          Can change a symmetrical pattern to an asymmetrical one.          Makes and describes different types of patterns such as: AB, AAB, and ABA, AABBA, ABACABA.          Uses appropriate vocabulary when describing a pattern.          Knows concepts: more than, less than, the same as.          Gives directions clearly and audibly.          Uses complete sentences when giving directions.          Knows how to use Etoys paint tools.          Enjoys making patterns independently 30 minutes or longer.</p>
<p><b>Teacher Information:</b>  <b>Etoys Quick Guides:</b> Click the question mark in Etoys to open the set of tutorials about basic tools and techniques.</p>	<p><b>Etoys Quick Guides:</b> Click the question mark in Etoys to open the set of tutorials about basic tools and techniques.</p> <p>Use Etoys Quick Guides if the lesson mentions unfamiliar tools or techniques.</p>
<p><b>Goals:</b></p>	<p>Students use Etoys paint tools to explore artistic and mathematical ideas.</p> <p>Students make and describe patterns. Students develop a</p>

	<p>vocabulary of concepts useful for explorations on the screen and in the real world.</p>
<p><b>Lesson 1:</b> 40 minutes</p> <p>Paint Tools: Brushes</p> <p>Paint Tools: Color Palette</p> <p>Halo Handles: Size, Color, Copy</p> <p>Halo Handles: Trash</p>	<p>Students will draw three shapes and use them to make patterns. The example uses a triangle, a rectangle and a spiral.</p> <p>Students draw a shape smaller than their thumb. Give students time to try all six brushes and erasers. (A design made using a thin line brush is harder to pick up with the cursor.) Click Keep and the design element can be moved on the screen with the cursor.</p> <p>Use a new paint tool from the Navigator Bar and draw the next shape; use a different color than the first one. Keep it. Paint a third shape with a new paint tool. Keep it.</p> <p>Right click on a shape and use the Halo’s Copy tool. Make copies of both shapes and then make a pattern from the copies. Experiment with patterns.</p> <p>Put unwanted shapes in the Trash.</p> <p>Give students time to work and think. Discuss: Tell students to call one of their shapes ‘A’ another one ‘B’ and another one ‘C’. When they have decided which is which to make the following patterns go all the way across the screen. ABA, AABB, AABBA, AAB, ABB, ABCABC.</p> <p>Ask students to make up a pattern and describe it. Ask them to describe a pattern they see on a neighboring computer screen.</p>
<p><b>Extend Lesson 1</b></p>	<p>Ask the students to make different patterns from the shapes. Put shapes side by side in a row; how many fit on the screen? Put shapes in columns; how many? Line the perimeter of the screen with a design; how many fit? Put a pattern in a specific location on the screen: top half, middle, left side, or right side. Add a new shape or set of shapes and create new patterns</p>
<p><b>Lesson 2</b></p>	<p>Students will put their design elements on Maker Buttons.</p>



Content Standard: 2 Using knowledge of structures and functions  
Content Standard: 3 Choosing and evaluating a range of subject matter, symbols, and ideas  
Content Standard: 4 Understanding the visual arts in relation to history and cultures  
Content Standard: 5 Reflecting upon and assessing the characteristics and merits of their work and the work of others  
Content Standard: 6 Making connections between visual arts and other disciplines

### Mathematics

#### Illinois Performance Standards

##### Kindergarten:

8A, 8B, 8D Patterns

Interpreting rhythmic patterns

Copying, extending, and creating pattern AB, AAB

9A, 9B, 9C Geometry

Creating and recording designs and shapes (triangle, square, circle, and rectangle)

Filling in shapes using smaller shapes

Observing and describing shapes and figures

##### First Grade:

6A, 8A, 6C, 8C, 10A Visual Patterns, Number Patterns and Counting

Identify and complete patterns

9A, 9B Geometry and Attributes

Sort and identify objects by attributes

Exploring attributes, designs, and fact patterns

Identify polygons and know their characteristics

Make polygons and know their characteristics

### Language Arts

#### Illinois State Goals K-3 Listening

4. A.1a Listen attentively by facing the speaker, making eye contact and paraphrasing what is said

4. A.1b Ask questions and respond to questions from the teacher and from group members to improve comprehension.

4. A.1c Follow oral instructions accurately.

	<p>4. A.1d Use visually oriented and auditory based media</p> <p>Language Arts                  Illinois State Goals K-3 Speaking</p> <p>4. B.1a Present brief oral reports, using language and vocabulary appropriate to the message and audience (e.g. show and tell)</p> <p>4. B.1b Participate in discussions around a common topic.</p> <p>National Educational Technology Standards (NETS)</p> <p>1. Basic operations and concepts                  Students are proficient in the use of technology.</p> <p>3. Technology productivity tools                  Students use technology tools to enhance learning, increase productivity and promote creativity.                  Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works</p> <p>4. Technology communications tools                  Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.</p>
<p><b>Resources:</b></p>	<p>Etoys Help Quick Guides: Open Etoys and click the question mark in the Navigator Bar to open a set of interactive tutorials that introduce basic tools and techniques.</p> <p><a href="http://EtoysIllinois.org">EtoysIllinois.org</a> for projects, tutorials, and lesson plans</p> <p><a href="http://Squeakland.org">Squeakland.org</a> Etoys software</p>
<p>Kh                  April 7, 2012</p>	