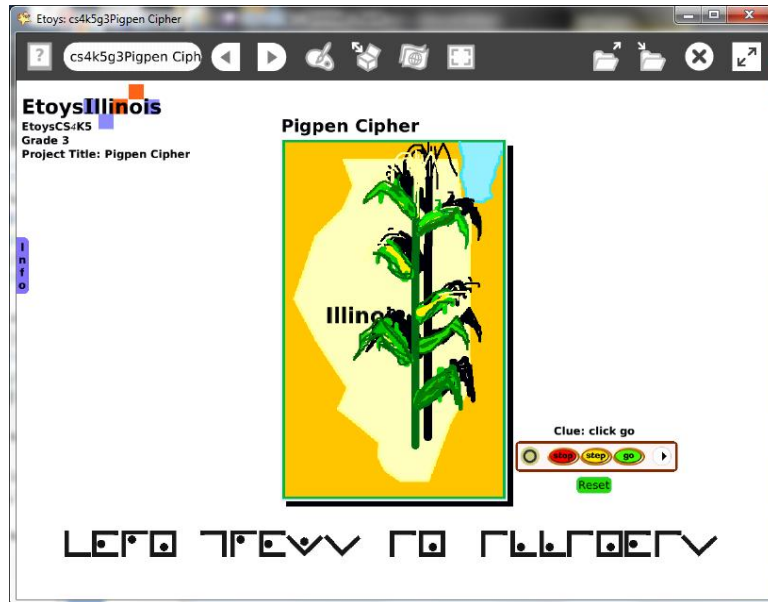


EtoysIllinois
 EtoysCS4K5
Grade 3
Pigpen Cipher

Description: Students will:
 Draw an illustration.
 Make one script that increases the length or width of an object.
 Make a second script that resets the length of the object.
 Learn about the Pigpen Cipher.
 Encipher the project's caption.
 Explore different ways of making the cipher's icons.

Project View



Subject: Mathematics

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

Vocabulary: cipher, encipher

Lesson 1: Discuss ideas about something that can move on a background.
 Examples: mustard oozing from a bottle, or corn growing, etc.

Paint Tools:
 Brushes

Paint Tools:
 Polygon Tool

Draw a simple background illustration similar to a cartoon or comic book panel and keep it. This project used a polygon from paints to outline a digital image of a map of Illinois.

<p>Supplies: Digital Images</p>	<p>Open a new paint palette and draw the object that will move.</p> <p>Keep the project, name it: namePigpen. E.g.: katePigpen</p>
<p>Lesson 2:</p> <p>Script Tiles: Length Width Script Tiles: X and Y</p> <p>Supplies: All Scripts</p> <p>Menus: Button Fires a Script</p>	<p>Constructing the scripts</p> <p>In this example, the bottom of the corn stalk is assigned a location and the length is increased. This script is controlled with an All Scripts Tool.</p> <p>The reset script returns the length to the original size and assigns it to go to the original location again.</p> <p>This script uses a button to fire this script.</p> <p>Keep the project: e.g. katePigpen</p>
<p>Lesson 3</p> <p>Supplies: Text</p> <p>Paints: Rectangle Tool</p> <p>Supplies: Add a New Flap</p> <p>Supplies: Digital Images</p>	<p>Enciphering the caption</p> <p>Students should write the caption/title keeping in mind that every letter will be represented with a symbol.</p> <p>Give students paper and pencil practice using the cipher.</p> <p>Open the project and type the caption Text from Supplies.</p> <p>Draw an outline square with a clean line tool. Copy it and repaint the copy match one of the cipher symbols. The erase tool can cut away parts without having to draw the square over and over.</p> <p>Encipher the caption. Students could help each other check spelling and accuracy in enciphering. Discard the typed text.</p> <p>Discuss whether or not to include a key and where it should be. The key can be a digital image or it can be constructed with paint tools.</p> <p>Publish the project: namePigpenFinal.</p> <p>Give students time to try their classmates' Pigpen ciphers</p>
<p>Standards:</p>	<p>Common Core Standards Mathematics: 2.OA.4</p> <p>Bloom's Taxonomy/Cognitive Domain: Knowledge: knows</p>

	Application: uses NETS 1. a 3.
Resources:	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. www.etoysillinois.org projects, lesson plans, software download www.mste.Illinois.org more 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
kh January 2011	