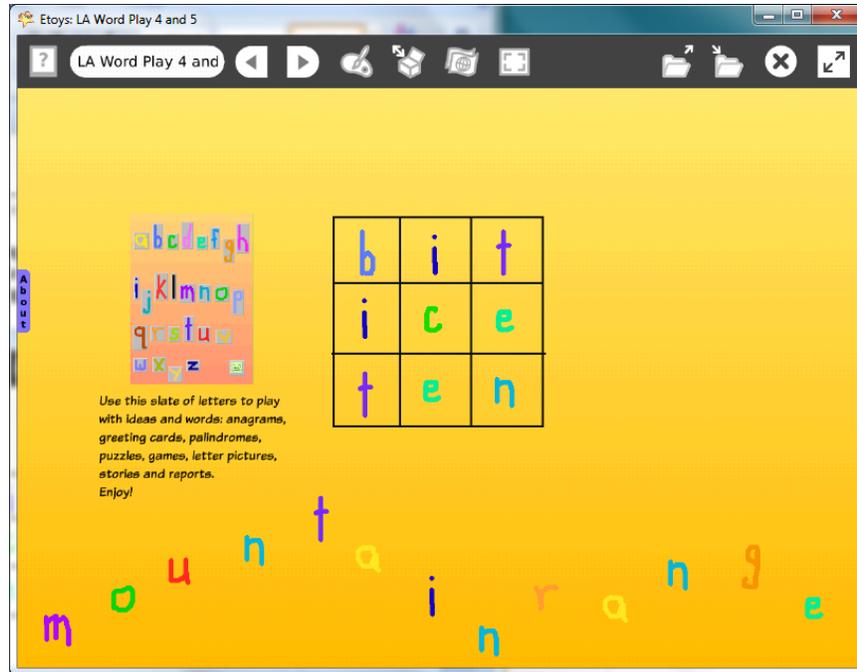


Language Arts

Word Play: Using Etoys to Make Anagrams, and Latin Squares

Fourth and Fifth Grade Levels



Introduction:	These Etoys lessons use alphabets drawn by students to create beautiful, funny anagrams and Latin Squares, poems, letter pictures, rebus, reports and posters. Students will use an Etoys letter slate already created or they can make a new one.
Topic:	Students will build fluency forming words and enjoy the challenge of thinking of the exact word that will meet the requirements they have set. Students play with patterns of letters and words and discover the enjoyment to be found in making words and letters obey strict and arbitrary rules.
Subject:	Language Arts
Time: One lab	The first project of each kind will take the longest; subsequent projects will take less time. Students who enjoy these projects

	<p>will make many of them. As they become proficient, ask them to create one in less than 10 minutes and then in less than 5 minutes.</p> <p>Students will recognize that, as the time gets shorter, most of the thinking time is before they use the computer.</p>
Description:	Students work alone or with a partner to create amusing word play projects. These projects can be compiled into print versions or Etoys books to build a library to be read and enjoyed by future students.
Vocabulary:	consonants, vowels, syllables, anagrams, Latin Square, grid, graph paper,
Evaluation Criteria:	<p>Knows what an anagram is.</p> <p>Knows what a Latin Square is.</p> <p>Create anagrams and Latin Squares.</p> <p>Makes a grid with appropriate grid size on a playfield.</p> <p>Knows how to Keep and Find a project.</p>
Teacher Information: Etoys Quick Guides: Click the question mark in Etoys to open the set of tutorials about basic tools and techniques.	<p>Etoys Quick Guides: 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. Give students time to read them too.</p>
Goals:	Students work independently or with a partner to create entertaining word play projects. Students will enjoy creating and solving puzzling problems.
Lesson 1: One lab Navigator Bar: Keep Find Projects	<p>Students will use a letter slate created at an earlier time.</p> <p>Students will make a 3x3 grid and use the grid as a base for a Latin Square. Three letter words grids are easy to make so they could make several during the lesson.</p>

<p>Paint Tools: Straight Line Tool</p>	<p>Draw a square and divide it into nine equal parts. Estimate distances.</p> <p>Look at the example Latin Square, analyze its characteristics; make a new one. Discuss.</p> <p>How many grids will fit on your computer screen and still show all the edges of the grids?</p> <p>Four letter grids are harder to fill.</p> <p>Five letter grids are harder still. Try.</p>
<p>Extend Lesson 1</p>	<p>Anagrams Use all the letters in a word and change their order to form a new word; for example the letters in ‘heart’ can be rearranged to spell ‘earth’. Give students a few words that will make anagrams and then ask them to think of others that will work. Students could exchange ideas to challenge others.</p> <p>Word Pictures: e.g. mountain range in the project.</p> <p>Rebus: above board</p>
<p>Student Information:</p>	<p>Think before going to the computer. This will give you more time to plan ideas and then use time at the computer to bring them to life and make them beautiful and enjoyable for others.</p>
<p>Standards:</p>	<p>Language Arts State Goals Fourth Grade Reading 1. A.2a Read and comprehend unfamiliar words using root words, synonyms, antonyms, word origins and derivations. Fourth Grade Writing 3. C.2a Write for a variety of purposes and for specified audiences in a variety of forms including: narrative (e.g. fiction, autobiography), expository (e.g. reports, essays) and persuasive writings (e.g. editorials and advertisements)</p>

	<p>Fifth Grade Writing 3. C.2b Produce and format composition for specified audiences using available technology</p> <p>Mathematics Fifth Grade 6D, 10A, 10B Algebra Concepts and Skills</p> <p>National Educational Technology Standards (NETS) 1. Basic operations and concepts Students are proficient in the use of technology. 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>
Resources:	<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. EtoysIllinois.org for projects, tutorials, and lesson plans Squeakland.org to download Etoys software</p>
kh April 8, 2012	