


EtoysIllinois
 EtoysCS4K5
Grade 4
Parking Test

Description:	<p>Students will:</p> <p>Draw a car and a simple parking lot.</p> <p>Use the drop shadow for all objects in the project.</p> <p>Construct new commands from two objects' script tiles.</p> <p>Make a script to control simultaneous motion on the x and y axis.</p> <p>Construct new commands from two objects' script tiles.</p> <p>Experiment with script tiles for x/y increase and/or decrease.</p> <p>Experiment with left/right and up/down options.</p> <p>Make reset scripts to position objects at specific locations.</p> <p>Type or draw a "You Passed the Parking Test" message.</p> <p>Create a script that displays the Passed message appropriately.</p> <p>Give the project a title.</p> <p>Experiment with text color options.</p> <p>Experiment with font and emphasis options</p> <p>Write directions and include them in a flap.</p>
Project View	 <p>The screenshot shows the Etoys project window titled 'Etoys: cs4k5g4ParkingTest'. The interface includes a toolbar with various icons, a status bar with 'cs4k5g4ParkingTest', and a main workspace. In the workspace, there is a blue car icon, a green square with a red dot, and a yellow 'RESET' button. On the right side, there is a large gray rectangle representing a parking lot with yellow lines. The text 'EtoysIllinois EtoysCS4K5 Grade 4 Project Title: Parking Test' is visible in the top left, and 'PARKING TEST FOR DRIVER'S LICENSE' is displayed in red text at the top right.</p>
Subject:	Mathematics
Etoys Quick	Click the question mark in Etoys to open the set of interactive tutorials

Guides	for basic tools and techniques.
Vocabulary:	Forward, turn, heading, left/right, up/down, x and y locations, font, emphasis
Lesson 1: Paint Tools; Brushes Paint Tools: Straight Line Tools Script Tiles: Scale Factor	Draw the background setting. Use a paint palette to paint a background and keep it. Open its white menu and select: resist being picked up, be locked to keep it from covering the moving objects by accident. Draw the car. Include headlights and taillights. Change the scale of the car to fit the parking places in the project. Copy the car to fill all but one of the parking places. Change the color of the cars so each is distinctive. Publish the project: nameCarPark e.g. KateCarPark
Lesson 2: Script Tiles: Forward and Turn Supplies: Joystick	Make a script to move the car; use forward and turn. Add a joystick control. Change the color and size of the joystick and its ellipse to control the range of motion. Keep the project
Lesson 3: Menus: Button to Fire a Script Menus: Drop Shadow	Make a reset script and button to fire it. The reset script locates the starting location of the car. It is more a more interesting project if a random number is added to the x and y locations. Use the white halo menu: drop shadow for as many objects as possible. Experiment with shadow color and offset options. Keep the project
Lesson 4 Supplies : Text Supplies : Add a New Flap	Type or draw a title, change the font, color and emphasis. Add a flap. Change the color using the white halo menu. Change the flap's tab wording using its white halo menu. Add text to the flap with directions and rules. Keep the project. Give students time to try neighbors' projects and to make further modifications to their project.

Standards:	<p>Common Core Standards Mathematics: 4.OA.3.5; 4.NF.5.7</p> <p>Bloom's Taxonomy/Cognitive Domain: Knowledge: selects Application: demonstrates, produces, uses, constructs, changes Analysis: analyzes, compares, experiments Synthesis: categorizes, modifies, plans Evaluation: compares, reviews</p> <p>NETS 1. a, b, c 2. a 3. b 4. a</p>
Resources:	<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 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</p>
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Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.