vidcode Creative Math

In the Vidcode Creative Math curriculum students will learn advanced programming concepts with a focus on cross-promoting basic math skills (algebra and geometry) and learning JavaScript coding through the Vidcode platform. One of the most common cross-curricular benefits of computer programming is that students have an easier time learning math. Following the Creative Math curriculum students will creatively engage with math and programming concepts to create their own expression projects.

FORMAT

Vidcode is a project-based web curriculum with year long courses that are delivered in units. Our courses are developed in cohesion with one another, and as stand-alone environments. The projects in this course review previously learned concepts and introduce new ones through open-ended projects.

WHO IS THIS FOR?

The Vidcode English Language Arts course is an opportunity for students to learn and think critically about the word and the world while learning JavaScript.

LEARNING OBJECTIVES

Students learn advanced concepts in JavaScript and the use of programming integrating math concepts from algebra and geometry.

10 hours

Topic 1: Emoji Algorithms

Example Activity: Complete algebraic emoji prompts:

🚴 + ? = 🥇

Programming Concepts:

● Built-in methods
● Repeat blocks
● Conditionals

And then write simple conditional statement algorithms to tell a story with emojis.

Topic 2: Pattern Recognition and Creation
Example Activity: Create drawings in programs that repeat a pattern. This can be done with the "repeat" (a.k.a. "loop") block. Students can demonstrate their understanding of multiplicative procedures and patterns that follow a specific rule.

Programming Concepts:

● JS video programming
● Repeat blocks
● Logical operators