CUTOUT4CS

TECH CORPS and the Teaching & Learning Collaborative, the creators of E^{4}Tech, are releasing a free set of Computer Science (CS) lessons for Grades 3-4 teachers!

#CutOut4CS lessons are designed specifically for 3rd and 4th grade teachers. Using a cookie design scenario and Scratch, #CutOut4CS, like all E^{4}Tech lessons, uniquely fuse mathematics and Computer Science. The lessons can be used for an hour once a day over a week or even as a full-day (5 hour) experience. #CutOut4CS lessons illuminate computational thinking experiences and focus on content standards in Operations & Algebraic Thinking.

To receive the #CutOut4CS lessons, student completion certificates and a classroom poster template, simply visit bit.ly/CUTOUT4CS and complete the short registration form.

CUTOUT4CS Lesson Overview

Lesson 1: **Recipe for Success**	During this lessons students watch a video and think about the steps to make cookies. By sequencing mixed up recipe cards, students think about the steps in an algorithm and relate that to how a computer science writes a program.
Lesson 2: **Preparing the Machines**	Before the machines can be programmed to design cookies, the icing needs restocked! This task engages students in a variety of ways to sort amounts of icing so that the machines can be restocked quickly. Combining sorting, number relationships and sort strategies, they begin to make sense of mathematics and computer science concepts.
Lesson 3: **Cookie Designs**	A number talk is a great introduction to this math task where students have to use models and representations to show what types of cookies will be produced in a batch of 20 cookies using given constraints. This is further extended in Lesson 5 as students find and explain additional patterns.
Lesson 4: **I am CUTOUT!**	Students discover more about programming while also seeing the Scratch environment. Using Cookie Design Programming cards helps students predict what a program might do prior to running it on a computer.
Lesson 5: **Adding Designs to the Mix!**	Extending the task from Lesson 3 further deepens mathematical understanding. Beginning with a number talk, students then find additional patterns to see how adding another 10 cookies changes their thinking.