By Zak Kolar

These lessons require little-to-no prior computer science/computational thinking knowledge for students (or teachers!)

So far, out of the DESE/EDC STEM+C Modules, I've only implemented the abridged Number Fluency and Fractions module (below). I'm working with my math coach to implement more of these math modules in the next few months.

ELA/Social studies:
- [Choose Your Own Adventure Scratch Story](#) (Grades 4-5)
  - CS focus: if/then/else statements
  - You could also tell a linear story and focus primarily on sequencing/debugging in Scratch
- Makey Makey Diorama (Grades 4-5)
  - CS focus: events/triggers
  - [Makey Makey](#) is a device that turns almost any real-world object into a controller for a computer. We recently got a grant to get a class set for every elementary school in Waltham.
  - Our 4th graders are learning about animals and defense mechanisms. They're each creating a diorama about one animal they've researched to highlight its habitat and defense mechanisms. Similar to this [project](#), except our students are recording themselves talking about their animal.
  - This is still a work in progress, but I'm hoping to write a blog post about it when it's done.
  - If you don't have Makey Makeys, you could create a virtual poster in Scratch where clicking different items or pressing keys plays the sounds.
  - See this [tutorial](#) to learn about playing sounds in Scratch.
  - See this [tutorial](#) to learn about recording your voice in Scratch.
  - See this [page](#) for all of the other bite-sized Scratch tutorials

Math:
- [Create a Math Game in Scratch](#) (Grades 4-5)
  - CS focus: if/then/else statements, variables
- [DESE/EDC STEM+C Number Fluency and Fractions](#) (Grade 5)
  - [Student Pages](#), [Student Pages (solutions)](#)
  - Computational thinking without coding
  - If you want to start small, I worked with my math coach to create an [abridged version](#) that only takes one class period. I'm hoping to expand this into a full lesson plan at some point, but right now the notes explain
- [Other DESE/EDC STEM+C lessons](#) (this page lists all modules by subject/grade level)

Science:
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