

An Embarrassment of Riches

MENU

STARTERS

Turtle Art

Intuitive & creative web-based block programming environment for learning mathematical thinking while creating beautiful images

Browser-based & iPad app

constructingmodernknowledge.com/turtleart/

Scratch

The MIT Media Lab's block-based multimedia environment for creating animations, games, sharing, and remixing programs - may also interact with the micro:bit and LEGO in a limited fashion

Browser-based & iPad app

scratch.mit.edu

SNACKS

Octostudio

New software from the Scratch team lets you program games and multimedia fun on a cellphone – interacts with micro:bit too

iOS & Android

octostudio.org

microBlocks

Live program micro:bits & similar microcontrollers in real time without downloading code

Browser-based, requires firmware update

microblocks.fun

HARDWARE

BBC micro:bit web site

Learn all about the revolutionary \$20 brainboard in use by millions of learners

microbit.org

Hummingbird Robotics Kit

Our favorite robotics and physical computing kit for classroom use, powered by the micro:bit and containing everything kids need to create great projects. Their Finch (a floor turtle) is cool too.

Birdbraintechnologies.com

MAINS

Microsoft MakeCode

Block-based web environment for programming the BBC micro:bit, arcade games, Minecraft, LEGO EV 3 & more – convert blocks to Python & Javascript if you wish

Browser-based

makecode.com

Lynx

Text-based multimedia version of the Logo programming language with robust programming functionality for computationally-rich projects

Browser-based

lynxcoding.club

Snap!

Block-based superset of Scratch designed for teaching computer science – can interact with the micro:bit & share projects online – our preferred programming environment for the Hummingbird Bit. Snap! was developed at UC Berkeley and is used through university CS courses

Browser-based

snap.berkeley.edu

[Beauty and Joy of Computing](https://www.berkeley.edu/~cs/189)

(AP Computer Science Principles curriculum)

Wolfram Language

The language driving Mathematica and Wolfram Alpha is available for users to embark on their

own insanely powerful computational adventures.

Browser-based

wolframcloud.com

TREATS

Turtle Stitch

A Snap! dialect that outputs to programmable embroidery machines. Functionality may soon be integrated into Snap!

Browser-based

turtlestitch.org