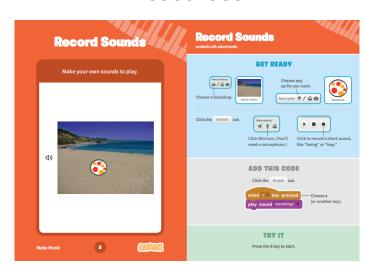
Scratch Across Every Subject: Music!

In what ways do music and Scratch inform one another? How can Scratch be a platform for musical expression and vice versa? Can music help introduce and extend computational creativity? Together, Scratch and music have limitless potential for learning and creating!

We've started assembling <u>Resources</u> and <u>Scratch Projects</u> and we'd love your input! Do you have lesson plans, activities, websites, videos, example projects, or something else to share?

Click the link under each section to add your contributions.

Resources

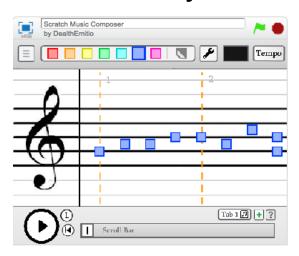


Want to add a resource to this list? Click here to submit it and we'll add it!

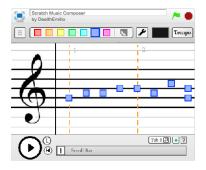
- Using "loudness" to make graphical vumeters
- Play, animate, and remix Spotify songs with Scratchx + Spotify
- Note numbers for writing music in Scratch
- Scratch Coding Cards: <u>Make Music</u> and <u>8 Ways to Use Scratch Coding Cards in the</u> <u>Classroom</u>
- <u>Teaching Computational Thinking through Musical Live Coding in Scratch</u>: A research paper and project collection of collaborators in the Music and CS departments at the University of Massachusetts in Lowell
- Making Music with Scratch: A workshop presented at Scratch@MIT 2012 on making music with Scratch
- Name that Note!: A scaffolded game design challenge for learning the notes in treble clef.
- Scratch can help bring the A into STEM? A Music and Technology/Robotics teacher shares his perspective.

- <u>See Inside the Classroom</u>: Nick Giacobbe's students created a symphony of Scratch, with cardboard and Makey Makey
- Students in Stacey Roshan's class focused on major keys, chords and intervals when creating their <u>Michael Jackson project</u>
- A <u>Scratch studio</u> of remixable Makey Makey music projects
- A two page guide to using Scratch with Makey Makey: <u>Getting Started with Makey Makey</u> and Scratch

Scratch Projects



Here are a few sample music projects in Scratch. Want to add your students' projects to this list? Submit them in this form and we'll add them!



The Music Note Game: In this game, memorize the pitches of the music notes played. Guess the pitches as close as you can and play them on the keyboard. You can play before starting the game if you want.

https://scratch.mit.edu/projects/114978712/



Call Me Maybe: A music video coded in Scratch! https://scratch.mit.edu/projects/111726252/



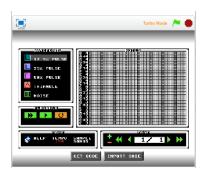
To All The Little Girls: A MAP (Multi-Animator-Project) music video for a song written/performed by a 13 year old girl, inspired by Hillary Clinton's speech after the 2016 election.

https://scratch.mit.edu/projects/150216037/



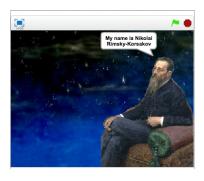
Touch-Typing Music: Play a song by typing in the letters as they're shown on the screen.

https://scratch.mit.edu/projects/29405458/



8-Bit Music Maker: This project allows you to easily create songs that sound fairly authentic to music on Nintendo's NES console, using the same waveforms that give the system its iconic sound. Includes 3 original example songs, too!

https://scratch.mit.edu/projects/87829696/



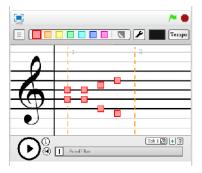
Rimsky-Korsakov: A Scratch project about Rimsky-Korsakov's orchestral piece *Sheherazade*:

https://scratch.mit.edu/projects/863821/



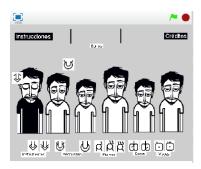
Boots and Cats:

https://scratch.mit.edu/projects/23251066/

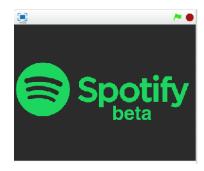


Scratch Music Composer: A Scratch project that lets you write your own music and hear it played back in real time:

https://scratch.mit.edu/projects/45045602/



Grupo Voces: Make a beat my layering different voices in this Scratch project: https://scratch.mit.edu/projects/1379320/



Spotify Remix: Stream a playlist of songs through this Scratch Project: https://scratch.mit.edu/projects/135534759/



A **Computational Music Model** inspired by composer Arvo Pärt: http://scratched.gse.harvard.edu/sites/default/files/scratch_files/1017/arvo_partish_aeolian.sb



A **beatbox quartet** by Scratch Team member and Makey Makey co-inventor, Eric R: https://scratch.mit.edu/projects/106102276/