





# **Beatbox Machine**

Coder Resources

### **Project Sequence**

(complete each step before moving to the next)

- 1. Sign in and create a new project
- 2. Create funny backdrops
  - a. Old method that works in offline Scratch: Create funny backdrops
- 3. Trigger sounds
- 4. Add in comments

## **Project Extensions**

(pick and choose extensions that sound interesting)

- 1. Fix a bug
- 2. Create a beat (or melody)
- 3. Customize sounds
- 4. Share your project
- 5. Create a thumbnail
- 6. Learn even more Scratch tips
- 7. Learn how to use a micro:bit with Scratch

#### **Debugging Exercises**

(practice your debugging skills by solving these bugs)

- 1. Why do we only see a blank backdrop when pressing an arrow key? How can you debug this code to make it show a funny picture before showing a blank backdrop?
- 2. Why is my drumbeat taking forever until I hear the next note?
- 3. Why do we only see one picture, hear all of the sounds, and then see a blank backdrop? How can we fix this to make a beat instead?
- 4. \*micro:bit required\* Why can't I make beats with three different sounds and pictures when each of the three micro:bit pins are connected?
- 5. Even more debugging exercises

## **Example Project and Files**

(use these resources to see the original project, learn how to remix the project, or to challenge yourself)

- Project: Example project
  Video: Project Preview (0:44)
  Video: Remixing a project (2:42)
- 4. Video: How to reverse engineer a project (2:29)