

Kreatives Arbeiten mit dem Makey Makey

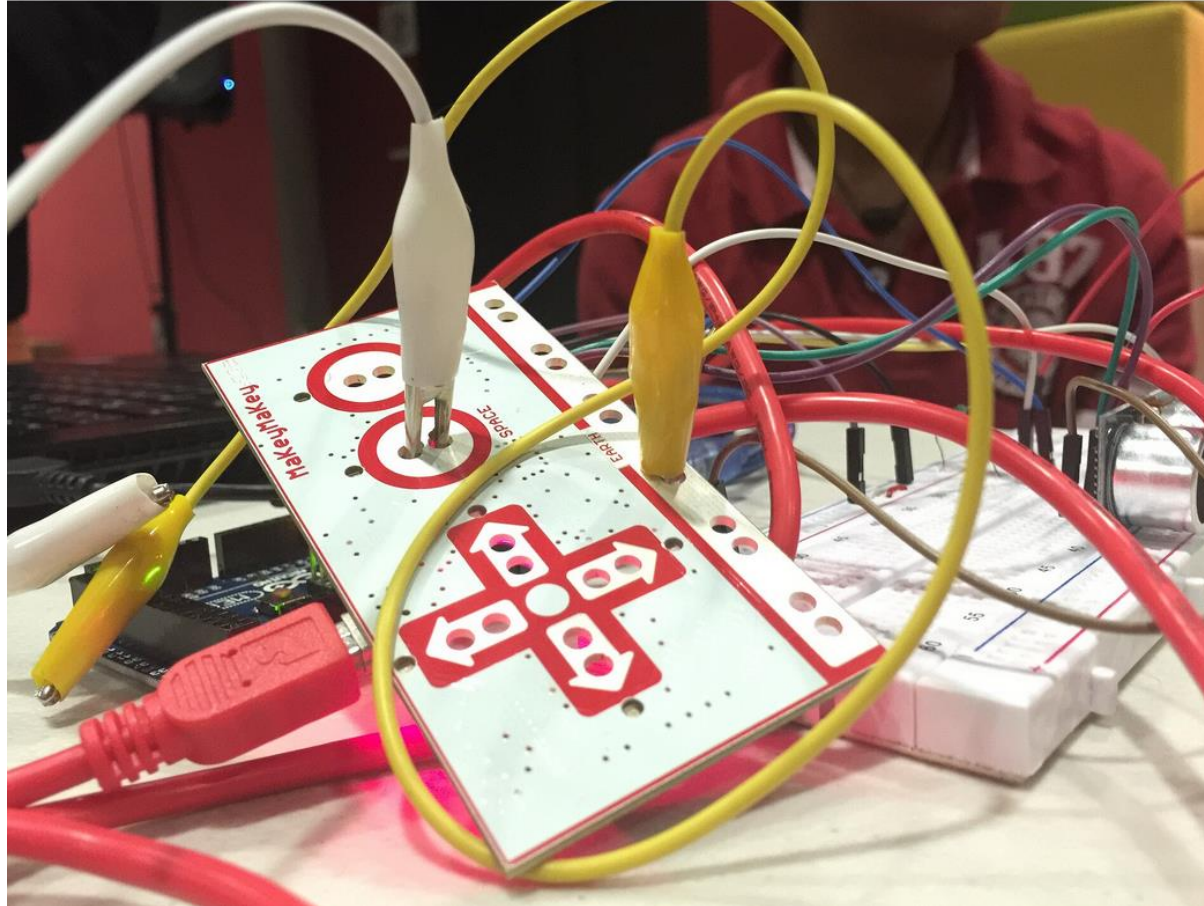
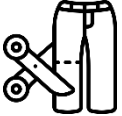
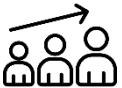


Bild: Padaguan auf https://commons.wikimedia.org/wiki/File:Makey_Makey.jpg, CC-BY-SA 4.0

Makey Makey im Kurzüberblick



-  Leiterplatte für kreative Making-Projekte mit leitfähigen Materialien
-  ab ca. 8 Jahre
-  keine Vorkenntnisse erforderlich
-  benötigte Materialien:
 - Makey Makey (mit USB-Kabel, Krokodilklemmen, Verbindungskabel),
 - Laptop/Tablet,
 - leitfähige Materialien,
 - Bastelmaterialien (Papier, Stifte, Schere, Stoff etc.)

Icons

Alter icons created by Smashicons – Flaticon

Young icons created by Nuaba – Flaticon

Experience icons created by Afian Rochmah Afif – Flaticon

Repair icons created by Freepik - Flaticon

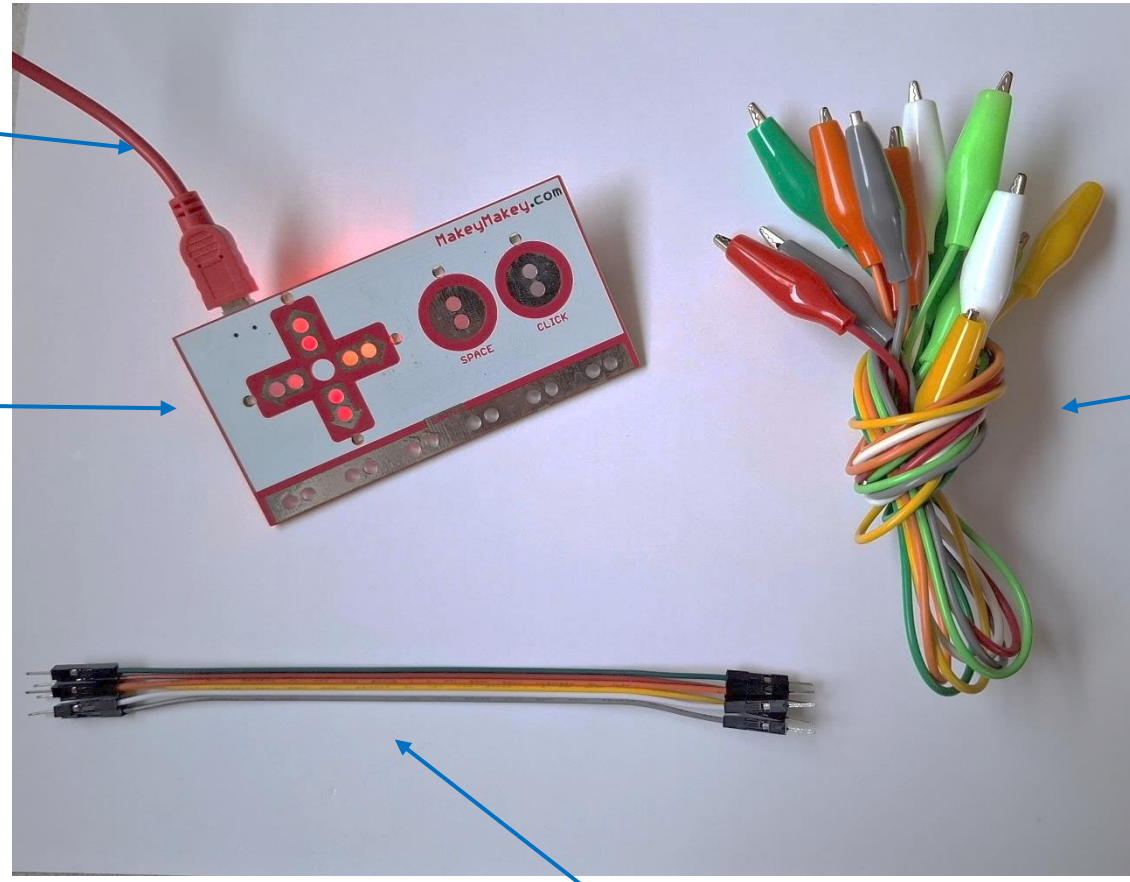
Was ist was?

USB-Kabel

Leiterplatine

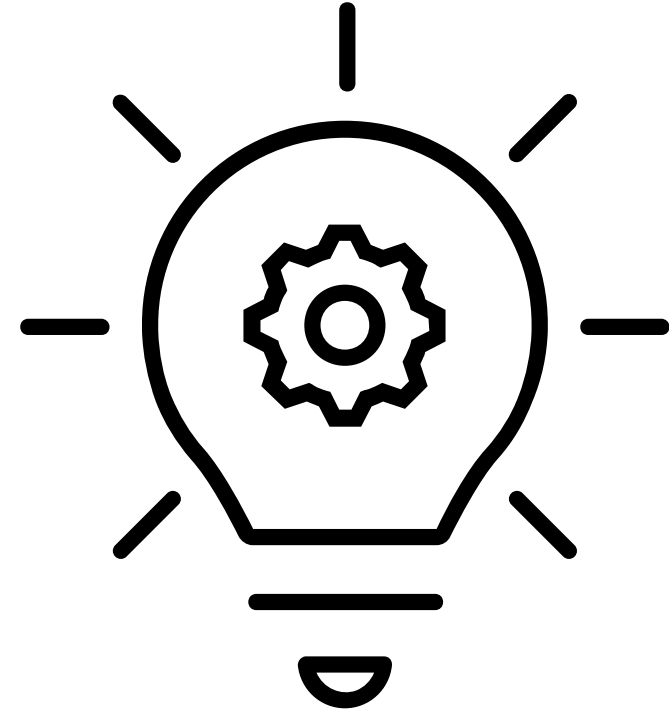
Krokodilklemmen

Verbindungskabel



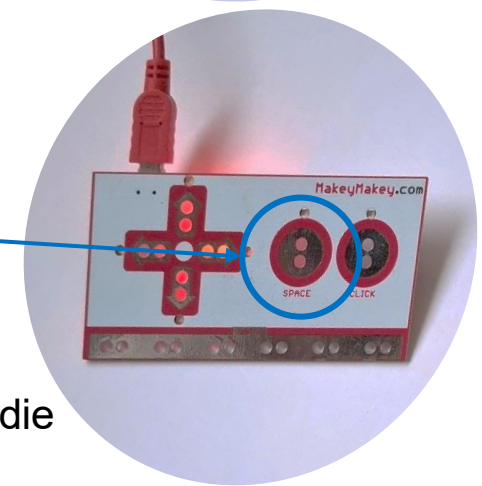
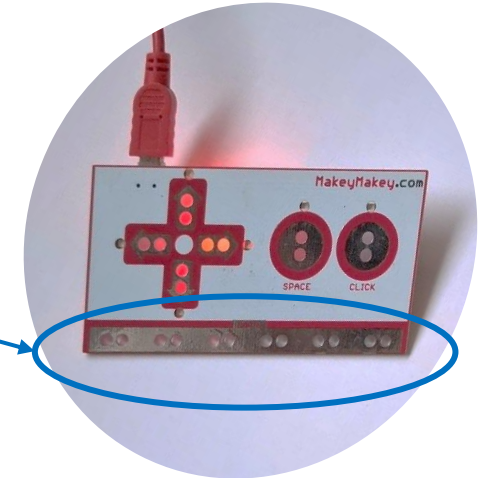
Prinzip

- Aus leitenden Alltagsgegenständen lassen sich eigene Tasten für den Computer bauen.
- Über die selbst gebauten Tasten wird ein Stromkreis geschlossen und löst einen Befehl am Computer aus.



Erstes Testen

- Verbinde die Leiterplatte über das USB-Kabel mit dem Laptop/iPad!
- Befestige eine Krokodilklemme in zwei Löchern des Ground-Bereichs der Platine!
- Nimm das Metallstück am anderen Ende der Krokodilklemme zwischen die Finger! -> Die Platine wird geerdet.
- Halte das Metallteil der Krokodilklemme weiter zwischen den Fingern und drücke die Space-Taste!
- Beobachte, was passiert!
 - Über der Space-Taste an der Leiterplatte leuchtet ein grünes Licht.
 - Der Cursor bewegt sich weiter nach rechts, wie wenn an der Tastatur des Laptops/iPads die Space-Taste gedrückt wird.



Kompatible Anwendungsprogramme



Classic Piano PIANO The original piano app! An oldy, but a goody! Play By: JoyLabz	Classic Bongos BONGOS Use the Makey Makey to turn anything conductive into a set of bongos! Play By: JoyLabz	New Piano PIANO 2 Use the Makey Makey to turn anything conductive into a piano key with ease! Play By: JoyLabz	Is It Conductive? CONDUCTIVE? Need to test if a material is conductive or not? The simplest of apps! Play By: JoyLabz	Alarm! ALARM Use your Makey Makey and this app to know when your precious conductive items are being snatched! Play By: JoyLabz	Buzzer App BUZZER Run your own gameshow and Buzz in with Makey Makey! Play By: JoyLabz	Audio Sampler SAMPLER Play our samples or record your own then plug and play your musical creations! Play By: JoyLabz	Interactive Poster POSTER Use the Makey Makey to create interactive posters with your own images and sounds! Play By: JoyLabz	Sheet Music SHEET MUSIC Compose your own tunes and play them back with Makey Makey! Play By: JoyLabz
Make-a-Sketch MAKE A SKETCH Use your Makey Makey to doodle and draw on your computer screen! Play By: JoyLabz	Counter App COUNTER Use your Makey Makey to tally votes, collect data, and more! Play By: JoyLabz	Makey Maked Soccer SOCCER Spend some time and kick the ball around with a friend, Makey Makey style! Play By: JoyLabz	Scoreboard App SCOREBOARD Use Makey Makey to keep score when your games come down to the wire! Play By: JoyLabz	Timer App TIMER Use your Makey Makey to start and stop a stopwatch or countdown timer! Play By: JoyLabz	Fruit Catcher FRUIT CATCHER Use the Makey Makey to build a controller to catch the fruit. Be careful to not catch the wrong thing! Play	Fuzzy Face FUZZY FACE Use the Makey Mouse Backpack to create a radical hairdo, suave mustache or hip beard! Play By: JoyLabz	Pixel Sketch PIXEL SKETCH Use your Makey Makey and the Makey Max Backpack to create amazing pixel works of art! Play By: JoyLabz	Bubble Pop BUBBLE POP Use the Makey Mouse Backpack to take a zen moment and pop some bubbles! Play By: JoyLabz
Match The Beat MATCH THE BEAT See if you and a friend have the moves and rhythm to dance like a star, falling stars! Play By: JoyLabz	Dungeon Rescue DUNGEON RESCUE Explore the dungeon avoiding bad guys and retrieve the treasure! Play By: JoyLabz	Space Rocks SPACE ROCKS Fly your ship through space on a galactic mission to destroy those pesky space rocks! Play By: JoyLabz	Bouncy Face BOUNCY FACE Keep that bouncing ball in play and break those blocks to win! Play By: JoyLabz	Pinball PINBALL A Makey Makey take on the classic wizard of the arcades of the past! Play By: JoyLabz	Moon Lander MOON LANDER See if you can maneuver your lander to safety using your Makey Makey! Play By: JoyLabz	Runner RUNNER Help Construction Carl get home by jumping over obstacles! Play By: JoyLabz	Dice Roller DICE ROLLER Use your Makey Makey to roll as many dice as you need! Play By: JoyLabz	Random Sound Player RANDOM SOUND PLAYER Play random sounds with a single key press! Play By: JoyLabz



Makey Makey-Apps



Blockbasierte
Programmierung
mit Scratch

Spiele mit dem Makey Makey Klavier oder Bongo!

Classic Piano



PIANO

The original piano app! An oldy, but a goody!

Play

By: JoyLabz

Classic Bongos



BONGOS

Use the Makey Makey to turn anything conductive into a set of bongos!

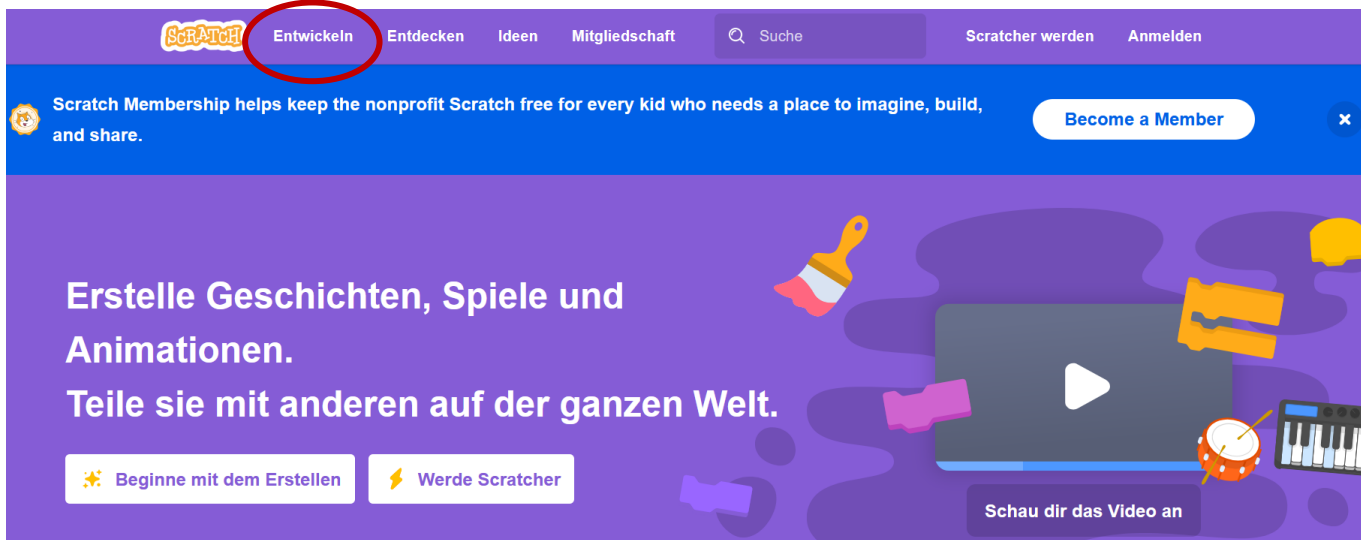
Play

By: JoyLabz

Interaktives Poster mit Makey Makey und Scratch gestalten



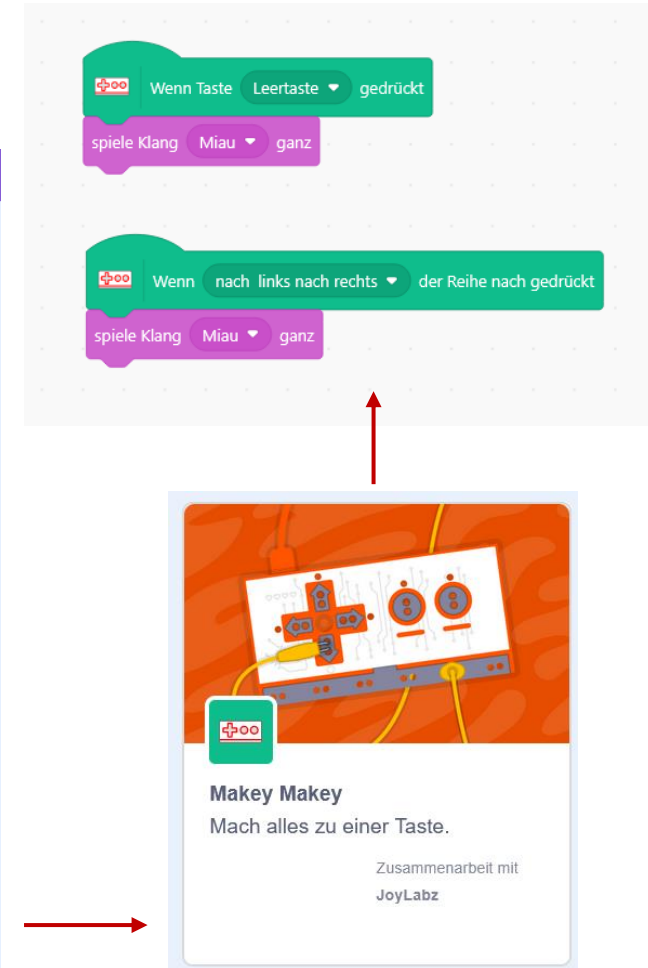
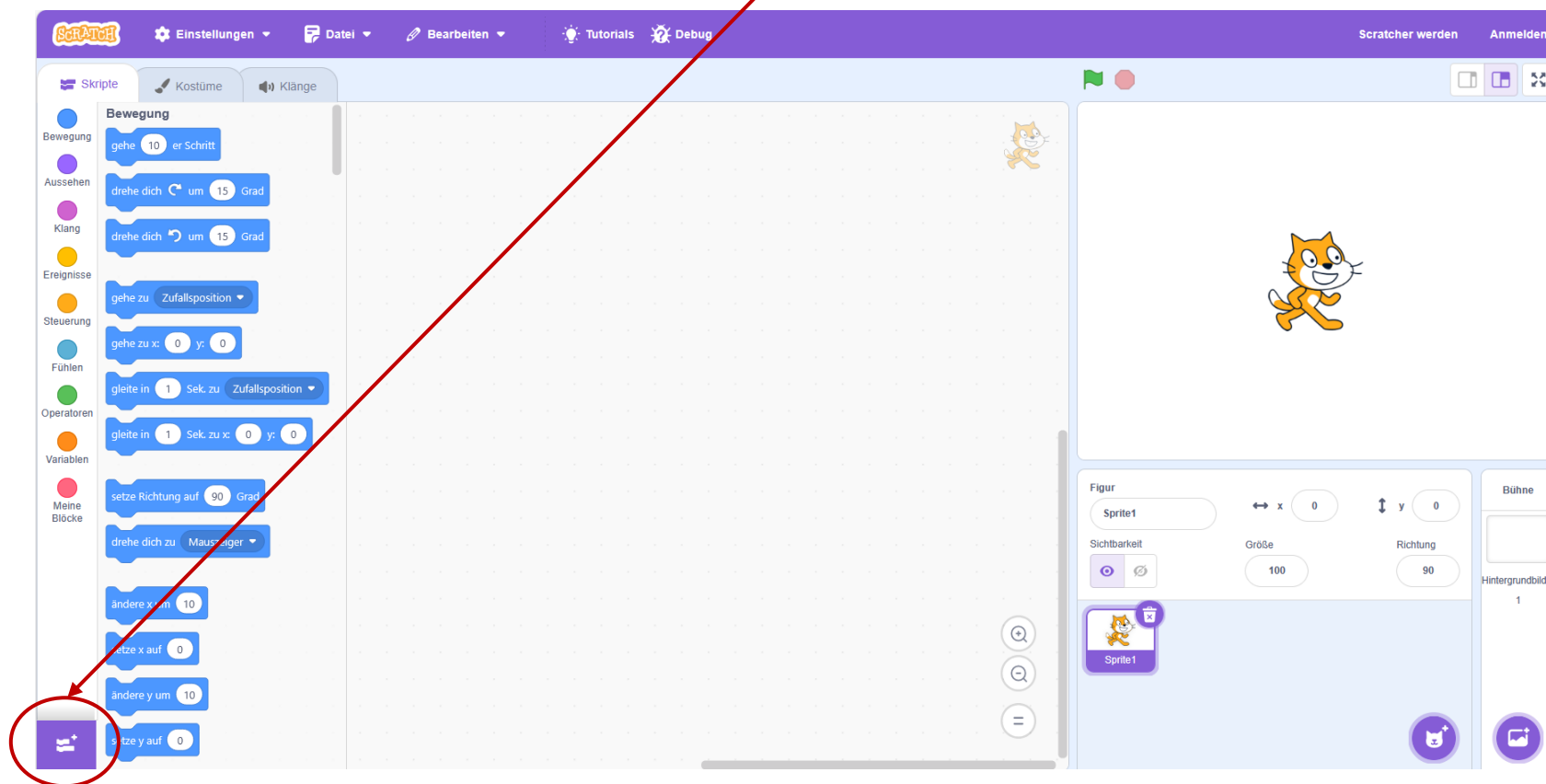
- Gehe auf die Scratch-Seite (<https://scratch.mit.edu/>) und wähle dort „Entwickeln“.



Blockbasierte
Programmierung
mit Scratch

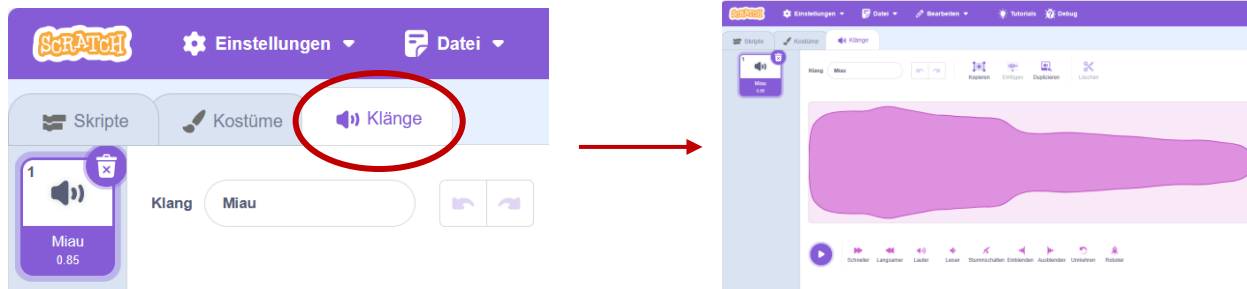
Interaktives Poster mit Makey Makey und Scratch gestalten

- Füge die Makey Makey-Erweiterung hinzu!



Interaktives Poster mit Makey Makey und Scratch gestalten

- Erstelle ein Poster mit 5 Bildern. Zu jedem Bild soll es später eine klingende Information geben.
- Nutze leitfähiges Material, z. B. Knete, Flügelklammern, Alufolie, Büroklammern, um eine Touchfläche auf dem Plakat zu gestalten.
- Nimm in Scratch unter dem Reiter „Klänge“ die Information zum jeweiligen Bild auf!



- Programmiere unter dem Reiter „Skripte“, welcher Klang bei Berühren eines bestimmten Anschlusses an der Leiterplatte erklingen soll!
- Verbinde mit den Krokodilklemmen die Touchflächen auf dem Poster mit den entsprechenden Anschlüssen der Leiterplatte!

