

MAKEY MAKEY INTRODUCTION LESSON 3-5

BASIC CIRCUITRY

OVERALL TIME 50- to 60-minute lesson

GROUPS Three to five kids per computer

Next Generation Science Standards

K-2 ETS1-1

Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

OBJECTIVE

Kids will explore and interact with basic circuitry using Makey Makey.

MATERIALS

- **Electronic device**
- **Makey Makey kit**
- **Games/activities from Makey Makey or Scratch websites**
 - <https://scratch.mit.edu>
 - <https://makeymakey.com>

PREPARATION

Set up two demo games or activities for six to eight stations from the Makey Makey or Scratch websites. Select two activities that integrate with your grade level standards in science, literacy, or math or one that you think would be engaging for your group. For example, the bongo drums or banana keyboard for reinforcing different types of patterns, ABB, AABB, etc.

LAUNCH 10 to 15 minutes

Explain to the group that they will explore and interact with basic circuitry using Makey Makey.

Show the group the materials that come in the kit:

- Makey Makey board
- Alligator cables
- White wires
- USB cord
- How To Use It guide

Explain how these materials are used in the selected activities.

Next, share the activities you selected. Then, choose two or three volunteers to come up in front of the class to demonstrate each activity.

EXPLORATION 40 to 50 minutes

Have kids form groups of four to five. Depending on the grade level and time available, consider having the groups already formed.

Explain to the group that they will have time to explore the Makey Makey and Scratch websites. Each group will choose an activity or game to try out. The challenge is for groups to find an activity that uses up to four arrows on the keyboard or the Makey Makey board.

**Remind kids of the center's technology expectations.*

CLOSING 10 to 15 minutes

Invite teams to gather around in a circle to answer the following questions:

- *What activity did your group try?*
- *Did you use the keyboard arrows or the Makey Makey board?*
- *What did you learn about Makey Makey?*
- *Are you interested in finding out more about Makey Makey?*
- *What would you like to try next using Makey Makey?*

NOTE

If more time is needed, consider having an additional exploration day.