

Makey Makey Morse Code

Lesson Plan for Grade 4

Prepared by Emilee Hillman & Liesl Toates

OVERVIEW & PURPOSE

Students will use morse code patterns to transmit information to one another and then create their own method of communication using patterns.

EDUCATION STANDARDS

(Next Gen. Science) 4-PS4-3 Generate and compare multiple solutions that use patterns to transfer information.

OBJECTIVES

1. Students will communicate with each other using morse code.
2. Students will create their own pattern to convey information to another student or group of students.

MATERIALS NEEDED

1. Computers with internet access and updated flash player
2. Access to an account at scratch.mit.edu <https://scratch.mit.edu/projects/128528423/>
3. Makey Makey
4. Materials for input - anything that can conduct electricity

ACTIVITY

Teacher will introduce the lesson with the book “Jackrabbit McCabe and the Electric Telegraph” by Lucy Margaret Rozier.

Students will research Morse Code, and how it has been used throughout history.

Students will learn how morse code uses a pattern of dots and dashes to convey information.

Teacher will partition the room, and students will divide into separate groups on each side. They will hook up a makey makey to the Morse Code scratch program by ltoates <https://scratch.mit.edu/projects/128528423/>. One group will use “buttons” (which are hooked up to the Makey Makey using very long wire) to send messages to the group on the other side of the room. Those students will then decode the messages.

Students will then develop their own method of communication using Makey Makey.

EVALUATION

1. Students are able to write a message using Morse Code
2. Students are able to decode the Morse Code messages
3. Students are able to communicate clearly using their own made up code