CRAFT & CODE
Interactive Stories

Makey Makey™

Craft a city out of cardboard, or draw a city to make an interactive poster. The idea behind this project is to craft or create buildings for an imagined city and then tell the story of the people who live in your crafted buildings.

Makey Makey are sharing this idea from the LEGO Foundation who are "inviting kids to create the buildings, neighborhoods, and stories of #StoryCity, a collaboratively constructed and imagined city that will let kids connect around the world."

The picture below is an interactive #StoryCity Poster. The picture on the right is a crafted #StoryCity by Liam Nilsen. In fact you can craft your Story City however you would like! Either draw a city, build a city, or construct a city in a shoebox. The important thing is to imagine the buildings and the stories of the people who live in your crafted city.

TASK – ADD CONDUCTIVE TOUCH-POINTS TO YOUR CITY

Use thumbtacks, paper clips, or pencil drawings to make your city interactive with Makey Makey and Scratch. By adding different conductive touchpoints you are building the hardware that will go with the software you create in Scratch!

Everyday conductive materials:
Kitchen foil – paperclips – pencils – staples – pins – coat hangers

Plus many more!

Makey Makey Inventors Kit

- Arduino compatible
- Simple USB connection
- Challenge and expand your imagination
- Invent ways to experiment and play
- Almost anything can be used as a keyboard

Order code 73-5500

Order code 73-5502

Makey Makey GO Includes Case with Magnet, Croc Lead, Keyring & Instruction Guide

- Contents: USB Invention Stick, case with magnet, 1 white crocodile lead, key ring, and instruction guide
- Simple USB connection
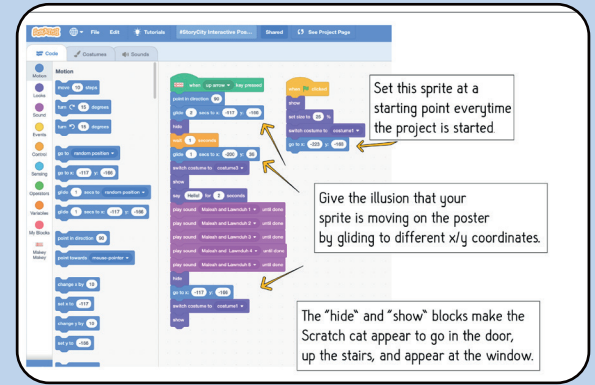- Have fun and expand your imagination

TASK – PROGRAM EVENTS; CODE STORIES AND ANIMATIONS IN SCRATCH

Write the stories you want to tell on a piece of paper or type them up so you can record them easily into Scratch. If you use multiple sprites in your Scratch project, you'll have to record your stories with the correct sprite. Scratch is the software component to your interactive story invention! Let's look at some examples before you start coding your own software.

Here is an example of a coded Story City drawing in Scratch. Press the UP arrow to hear one story. Press the SPACE bar to hear another story. Lastly, press the DOWN arrow to experience the final story.

Here is an example of the coded story diorama in Scratch. To play along, Frederico asks you to find the pigeon drawing (press the SPACE key), the Family Portrait (which is connected to the UP arrow), the hiding dog (press the DOWN arrow), and the messy scribble by Bonnie (press the RIGHT arrow).

Set this sprite at a starting point everytime the project is started

Give the illusion that your sprite is moving on the poster by gliding to different x/y coordinates.

The "hide" and "show" blocks make the Scratch cat appear to go in the door, up the stairs, and appear at the window.

TASK – RECORD SOUNDS

To add your stories as sounds to your project, click on the "Sounds" tab where you can choose a sound from the Scratch library, record your own sound, or upload an mp3 or wav file to use in your project.

Click on the microphone to record your own sound.

TASK – CODING ANIMATIONS WITH MOVEMENT AND EFFECT

To get started making your story even more interactive, you'll need to understand a few things about coding. To create the software for your Makey Makey inventions, you have to speak to your computer in a language it understands!

Hook up Makey Makey and Share

Once you've coded your story in Scratch, hook it up to Makey Makey and share it with us!

Attach a sound block to a hat block to trigger the sound or change the pitch, volume, etc

Sounds you choose or record will be in the dropdown of these sound blocks