Getting Started With

SCRATCH

version 2.0

http://scratch.mit.edu
SCRATCH is a programming language that lets you create your own interactive stories, animations, games, music, and art.

This guide shows you how to make a project in SCRATCH.

To start a new project, go to SCRATCH and click Create.

If you have a SCRATCH account, log in so your project saves.
Drag a **MOVE** block into the Scripts area.

Click on the block to make the cat move.
Drag out a **PLAY DRUM** and snap it onto the **MOVE** block.

Click and listen.

*If you can’t hear it, check that the sound on your computer is on.*

You can choose different drums from the pull-down menu.
Add another **MOVE** block. Click inside the block and type in a minus sign.

Click on any of the blocks to run the stack.

Add another **PLAY DRUM** block, then choose a drum from the menu. Click to run.
Drag out a **REPEAT** block and drop it on top of the stack. You want the mouth of the **REPEAT** to wrap around the other blocks.

*To drag a stack, pick it up from the top block.*

You can change how many times it repeats.

Click to run.

*You can click on any block to run a stack.*
Click the **LOOKS** category and drag out a **SAY** block.

Click inside the **SAY** block and type to change the words. Click to try it.

Then snap the **SAY** block on the top.
Whenever you click the green flag, your script will start.
To stop, click the stop button.

Drag out a \texttt{when \textcolor{red}{flag} clicked} block and snap it on top.
Now try something different...

Drag out a CHANGE EFFECT block.

Click to see what it does.
Now press the space bar on your keyboard.

You can choose a different key from the pull-down menu.
You can add a backdrop to the Stage.

Click to choose a new backdrop.

Choose a backdrop from the library (such as “Spotlight-Stage”).

Click OK.

The new backdrop now appears on the Stage.
Each object in Scratch is called a sprite.

To add a new sprite, click one of these buttons.

**NEW SPRITE BUTTONS:**

- Choose from the library
- Paint your own sprite
- Upload your own image or sprite
- Take a picture (from a webcam)

To add this sprite, click 🌟 then click **People** and select “Cassy Dancing.”

You can drag the characters to where you want them.
Now you can tell the sprite what to do. Try the following, or explore on your own.

**ADD SOUND**

Click the **SOUNDS** tab.

You can **Choose** a sound

**Record** your own sound

Or **Import** a sound file. (MP3, AIF, or WAV format)

Then, click the **SCRIPTS** tab, and drag in a **PLAY SOUND** block.

Choose your sound from the pull-down menu.

**CHANGE COSTUMES**

Each sprite can have more than one costume.

To change the current costume, click the **COSTUMES** tab.

Then click on a different costume for the sprite.

**ANIMATE**

You can animate a sprite by switching between costumes.

Click the **SCRIPTS** tab.

Create a script that switches between costumes.
Type a title for your project.

For more ideas, click Tips:

The Tips Window shows example scripts you can use in your project.

It also explains what each of the blocks in SCRATCH does.
To save your project online, make sure to log in.

(If you want to save the file to your computer drive, click the File menu and choose “Export to local drive.”)

When you are ready, click

![Project Page]

Click for full screen viewing.

When you share, others can visit and interact with your project.

Now what? You can Create a new project or Explore for ideas.

To find out more, click Help or go to http://scratch.mit.edu/help
Scratch is a programming language that makes it easy to create your own interactive stories, games, and animations – and share your creations with others on the web.

Scratch is developed by the Lifelong Kindergarten research group at the MIT Media Lab (http://llk.media.mit.edu). Our group develops new technologies that, in the spirit of the blocks and fingerpaint of kindergarten, expand the range of what people can design, create, and learn.

The development of Scratch has been supported with funding from the National Science Foundation, MacArthur Foundation, Intel Foundation, Google, Microsoft, and the MIT Media Lab research consortia.

Supported by NSF Grant No. 1002713. Any opinions, findings, and conclusions or recommendations expressed on this site are those of the authors and do not necessarily reflect the views of the National Science Foundation.