

Getting Started with

SCRATCH

Create your own games, animations,
interactive stories, and more!



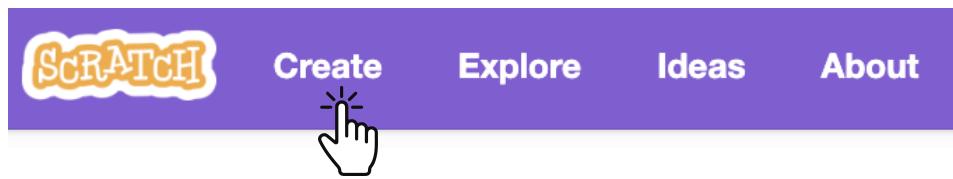
Getting Started



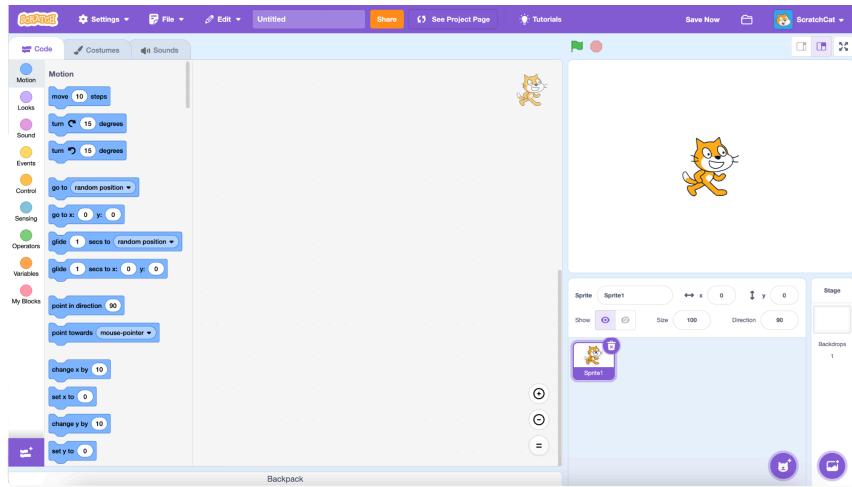
You can use Scratch online at: scratch.mit.edu

go to: scratch.mit.edu

Once you've navigated to scratch.mit.edu, click **Create**.



This will bring you to the **Scratch Editor**, where you can start creating projects.



If your computer uses an older operating system, or your internet connection is unreliable, you can **download Scratch** and use it offline.



Visit <https://scratch.mit.edu/download> for information on downloading and installing the Scratch app.



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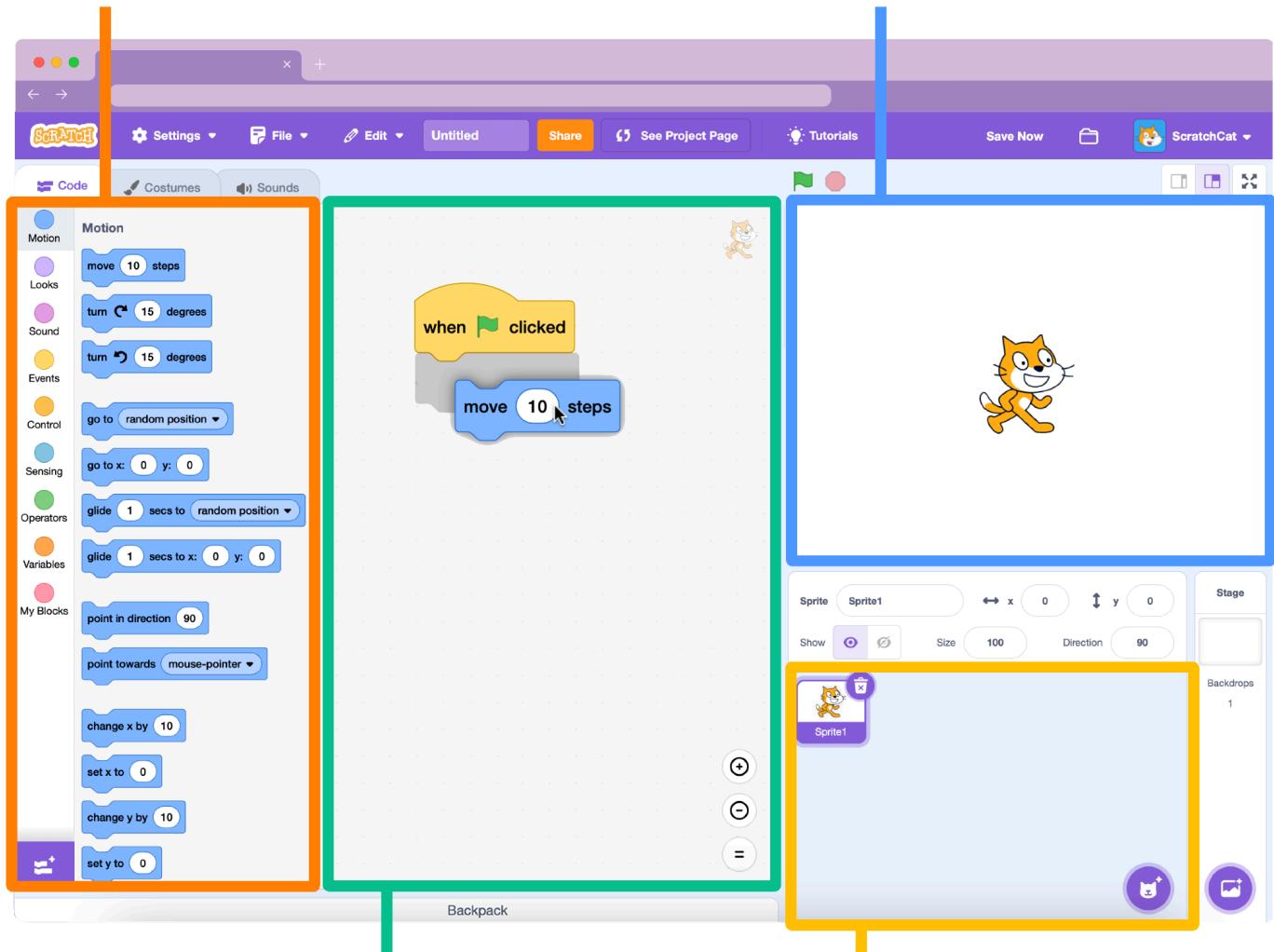


The Scratch Editor

The Scratch Editor is where you create projects in Scratch. Here are its main parts:

Blocks Palette

Blocks for coding your projects.



Coding Area

Drag in blocks and snap them together to code your sprites.

The Stage

Where your creations come to life.

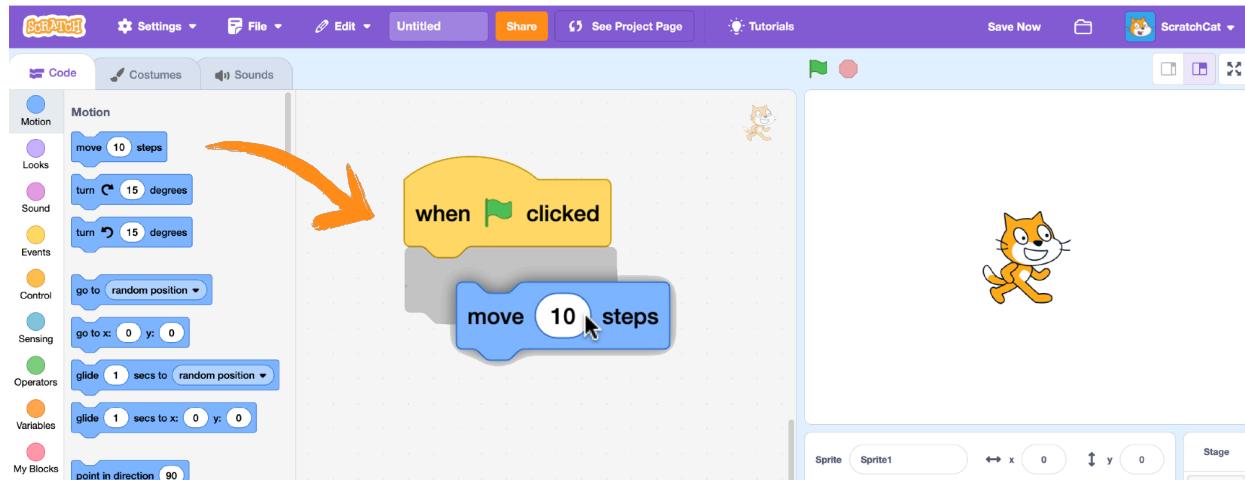
Sprite List

Click the thumbnail of a sprite to select it.

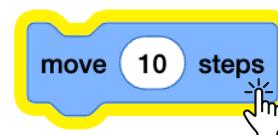
Let's Code!



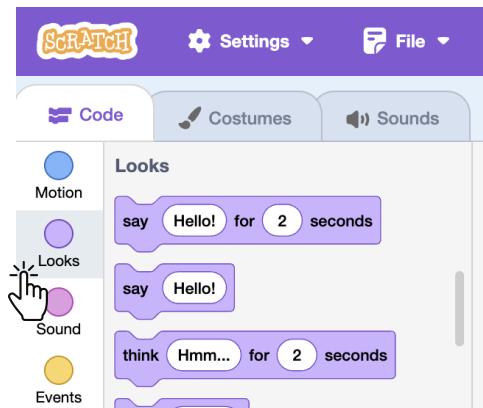
To code projects in Scratch, you snap together blocks. Start by dragging out a **"move"** block.



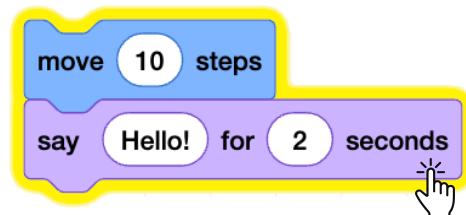
Click the block to try it. Does your cat move?



Now say something!
Click the **Looks** category.



Drag out a **"say"** block.
Snap it onto the **"move"** block.
Click on your blocks to try them.





What Is a Sprite?

In Scratch, any character or object is called a sprite. Every new project in Scratch starts with the Cat sprite.

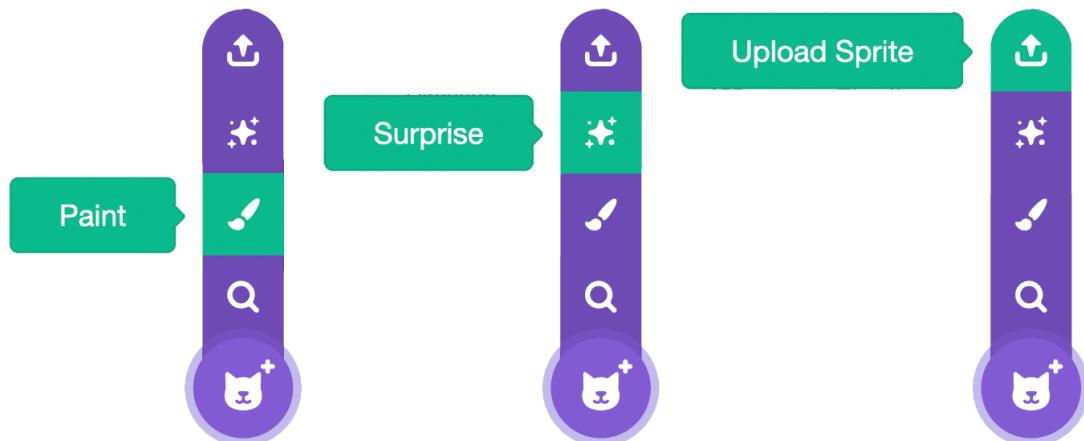


Want to choose a different sprite?

Click the **New Sprite** icon to choose a sprite from the library.



Or, hover over the New Sprite icon to see more options to draw your own sprite, get a surprise sprite, or upload an image from your computer.



Want to **delete a sprite** from your project?



First, select the sprite by clicking on its thumbnail in the Sprite List. Then, click the trash can to delete the sprite.



Where Is Your Sprite?

Every sprite has an **x** and **y** position on the Stage.

x is the position of the sprite from left-to-right.

y is the position from top-to-bottom.

At the very center of the stage, x is 0 and y is 0.



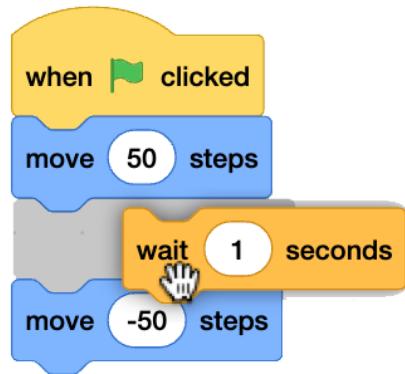
When you move your sprite, you can see its x and y position change.

Quick Tips



Something not working as expected?

Add temporary waits to slow down the action and give you time to process if a piece worked or not. Once you know the code is working, you can remove these waits.



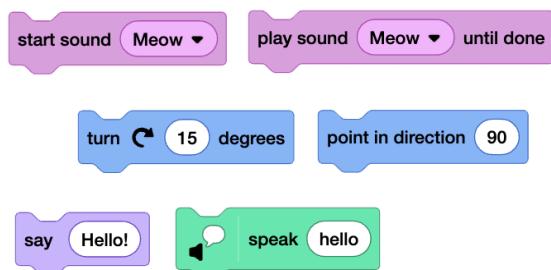
Try adjusting the order/the sequence of the blocks. Ask yourself: What needs to happen first? What needs to happen second?

Separate the blocks and click on each individually to see what it does. Is there a **similar but different** block option that might work better in your sequence?

First...

Second...

Third...



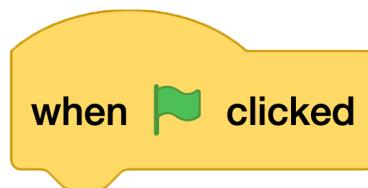
Debugging is finding the errors in your code. [You can find more Debugging strategies by clicking here.](#)



Next Steps

Many Scratch projects are started when the user clicks the green flag above the stage.

Click the **Events** category and drag out the block you want to activate your code sequence. Attach your code sequence to the event block and click the green flag to test.

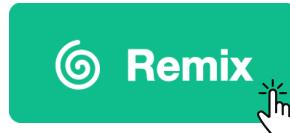


You can choose to share your projects with the global Scratch community by clicking the **Share** button on your project page.

- Sharing projects allows others to experience your program and see inside to explore your code.
- Projects can be unshared at any time (under “My Stuff”). And commenting can be turned on or off, based on your preference.



Embrace remix culture! Remixing is encouraged in the Scratch community, as it is a great way to collaborate and connect with others and can lead to new ideas and also help others grow as creators. Click the **Remix** button on any shared project to create a copy. Then, make a meaningful change to the project to personalize it and make it your own.

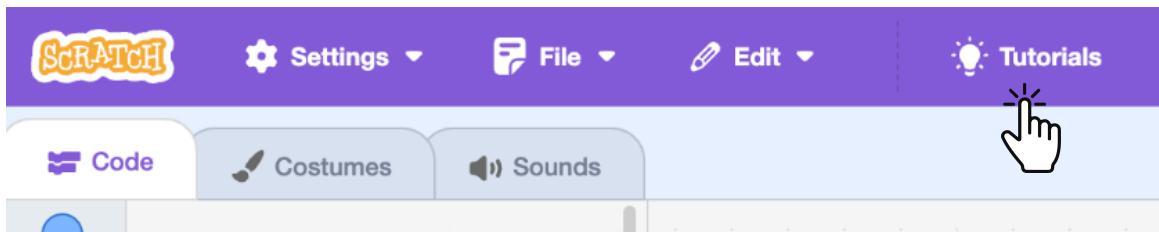


Tutorials

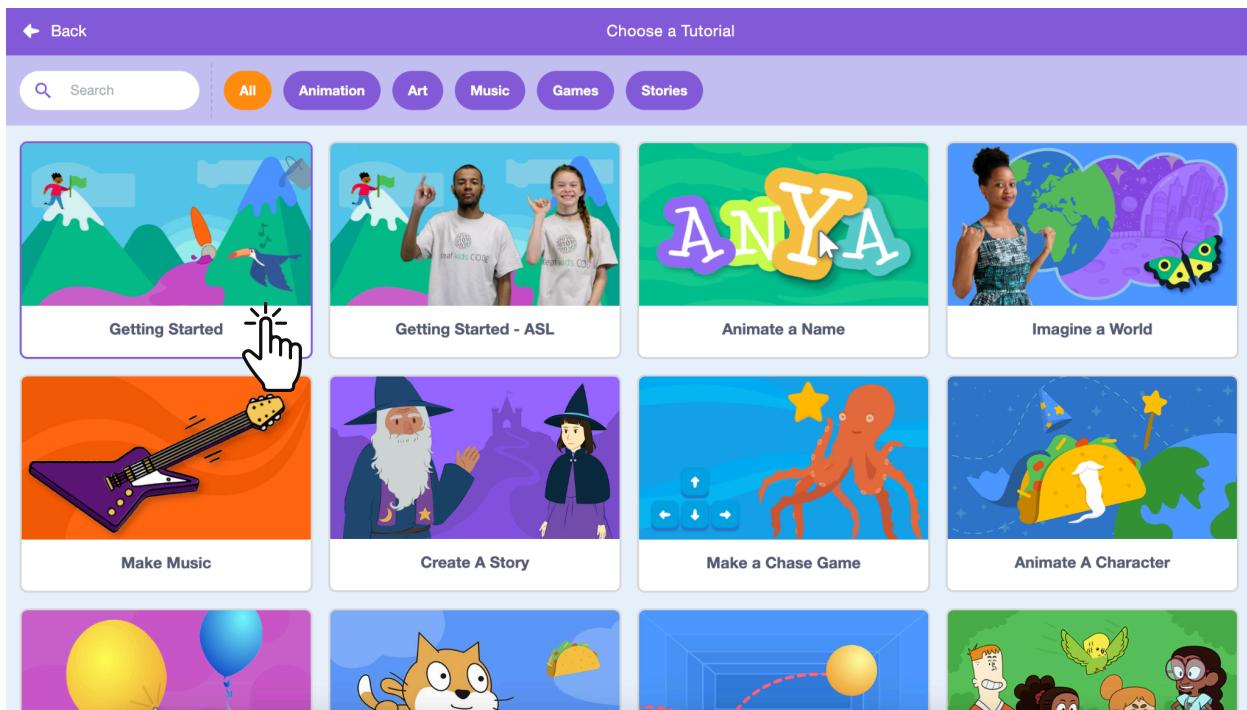


There are a range of tutorials available in the Scratch Tutorials Library, which guide learners in creating projects with Scratch. Students can get started making their own stories, animations, and games.

You can get to the **Tutorials Library** from the Scratch Editor by clicking the Tutorials button.



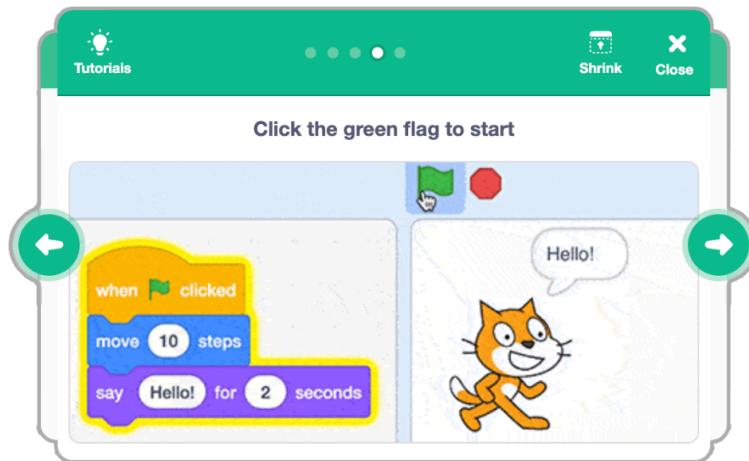
The **Getting Started tutorial** will walk you through the basics.



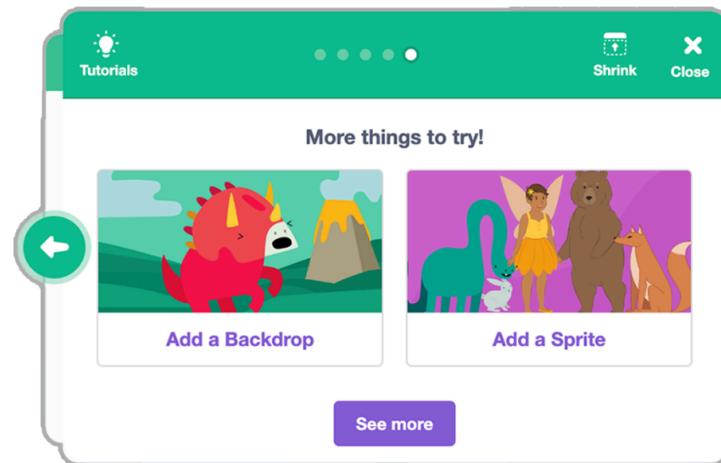
Tutorials



Once you've selected the tutorial, it will open in the Scratch Editor. Click the green arrow to see each step.



When you've reached the end of a tutorial you can select another tutorial, and keep adding to your project. Click here to the “See More” button to see all the Tutorials.



You can also look for video tutorials on our official Scratch YouTube page:
<https://www.youtube.com/c/ScratchTeam>

Coding Cards



The Scratch **Coding Cards** provide another way to learn to create projects with Scratch. Download the cards at scratch.mit.edu/ideas.



Each set of cards starts with a title card, showing you what you can create.

The **Animate a Character** cards are a great set to start with. Each set of cards starts with examples of what you can create and a list of all the cards in the set.

After each title card is a series of cards walking you through each step of creating a project.

Add your own sprites, backdrops and more!



Move with Arrow Keys

Use the arrow keys to move your character around.

Animate a Character 1 Scratch

The front of each card shows you what you can create...



...and the back shows you how to do it.



Move with Arrow Keys

scratch.mit.edu

GET READY

Choose a backdrop. Soccer 2 | Choose a character. Pico Walking

ADD THIS CODE

Change x Move your character side to side.

when left arrow key pressed
change x by -10

when right arrow key pressed
change x by 10

Change y Move your character up and down.

when up arrow key pressed
change y by 10

when down arrow key pressed
change y by -10

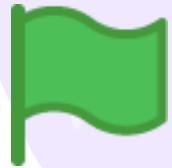
Type a minus sign to move left. Type a minus sign to move down.

TRY IT

Press the arrow keys on your keyboard to move your character around.



Get Creative!



Encourage students to use their imagination as you create projects. There are many different ways they can make their Scratch projects unique.

Create your own unique and original sprites! See our guides for more on:

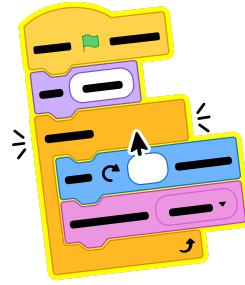
- [Bringing Your Drawings Into Scratch](#)
- [Creating a Sprite with the Paint Editor](#)
- [Remixing and Re-imagining Sprites](#)



Choose a sound or record your own. See our guide [Sound: Add, Record, and Use Text to Speech Blocks](#) for more information.



Try changing numbers or adding blocks to your code to see what happens. Experiment and customize your project however you want!

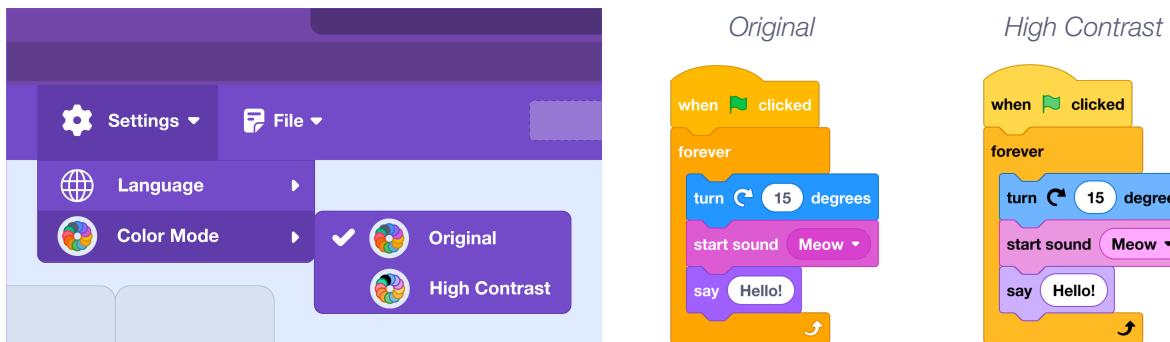




Choose Your Color Mode

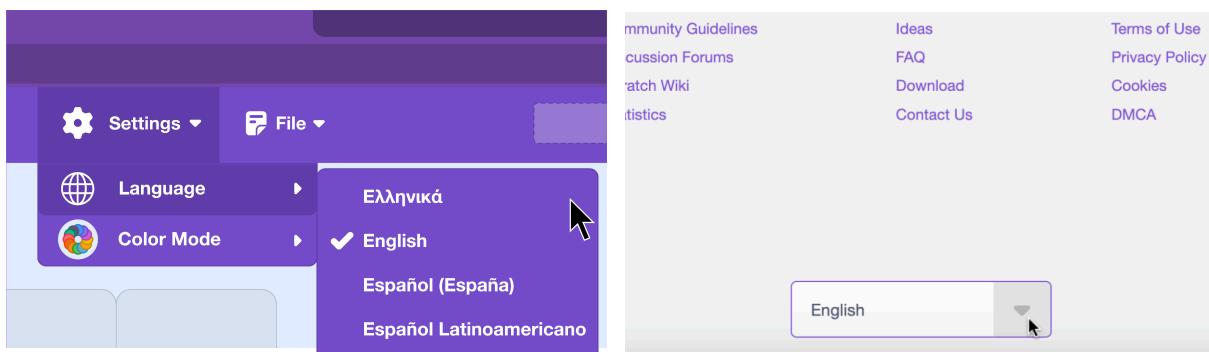
We want to make sure everything on the site is easy to read so more people can express themselves on Scratch, and we want to follow Web Content Accessibility Guidelines. So Scratchers have the option to use High Contrast blocks, which will be easier for some people to read, or stick with the original block colors as they work in the project editor.

Set your mode in the project editor under **Settings > Color Mode**. And you can always toggle the color mode back and forth if your preference changes.



Choose Your Language

Do you, or a Scratcher you are working with, read/work in a language other than English? You can adjust the language of the project editor under **Settings > Language**. Or set the language at the bottom of many of our site pages.





Educators

Looking for even more resources?

- [**Teacher Account Guide**](#) for more information on setting up teacher accounts and managing classes
- [**Studio Guide**](#) for more on creating studios
- [**“Bring Yourself Into Scratch” Lesson Plan**](#) to use Scratch to help your students get to know their classmates and build community based on shared values
- [**Scratch Design Journal**](#) to help students imagine, plan, iterate, and reflect throughout all of the phases of their project’s development
- [**Show-and-Tell Sharing Sheet**](#) or [**Project Gallery Walk Self Reflection and Peer Feedback Sheet**](#) for use with students when sharing their work
- [**Debugging Strategies Posters**](#) for a collection of possible strategies to use to help your students get unstuck
- [**Debugging Reflection Worksheet**](#) to help learners reflect on what they learned

Tip: If you'd like to translate this guide, [click here to make a copy](#) of this Google doc.

