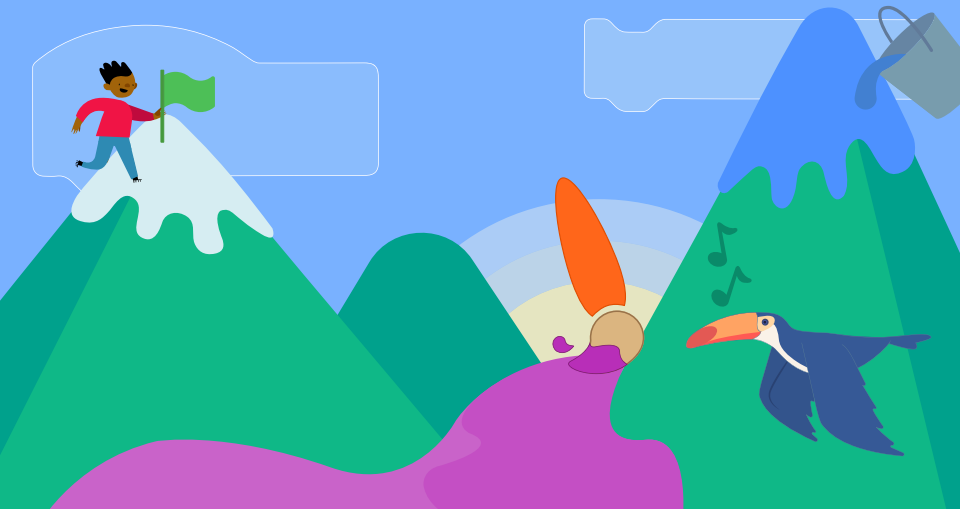# Getting Started with

SCRATCH

3.0

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

GETTING STARTED

First, you'll need to start Scratch.

Start by launching Scratch Desktop
If Scratch Desktop is not already installed on your computer, you will need to install it.

There are two versions of the Scratch offline editor available:

Use **Scratch Desktop 3.0** If your computer is running Windows 10 or higher, or macOS 10.13 or higher.

Use **Scratch 2** if your computer uses an older operating system. If you are using Scratch 2, use the *Getting Started with Scratch 2* booklet and materials.

scratch.mit.edu

You can also use Scratch online at: scratch.mit.edu
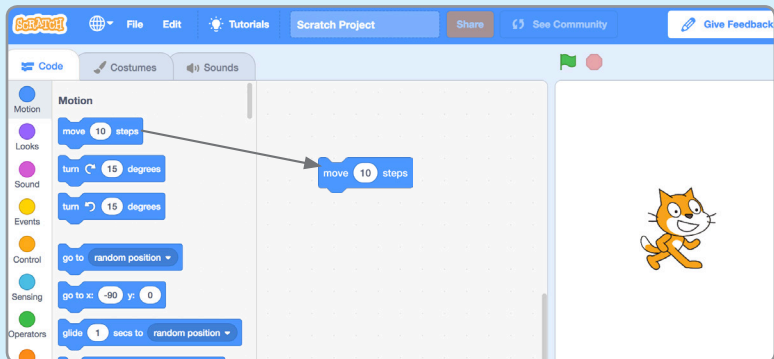Using Scratch online requires an internet connection.

Once you've navigated to scratch.mit.edu, click **Create** to get to the Scratch Editor.
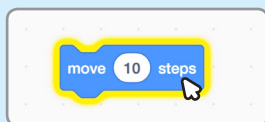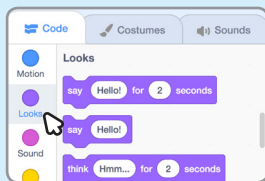
LET'S CODE!

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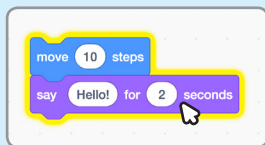

Click the block to try it.
Does your cat move?

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.
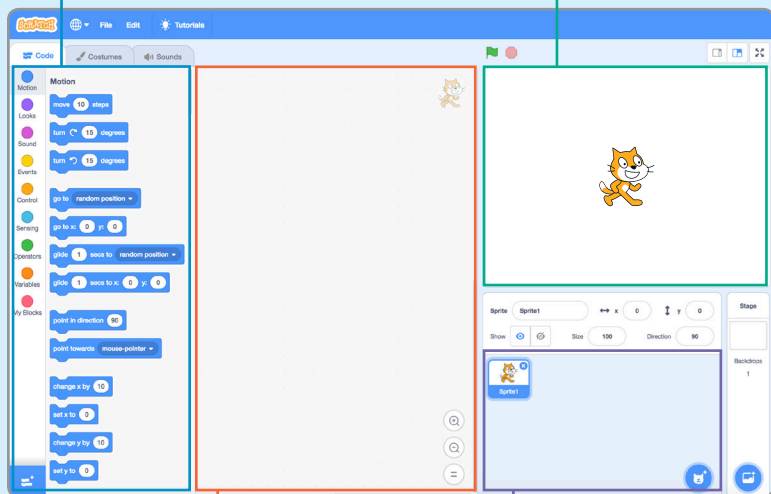
THE SCRATCH EDITOR

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

Blocks Palette
Blocks for coding
your projects

The Stage
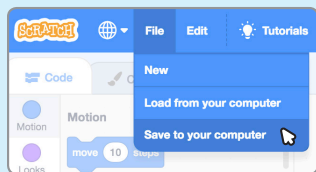Where your creations
come to life

Coding Area
Drag in blocks and snap them
together to code your sprites

Sprite List
Click the thumbnail
of a sprite to select it

Saving in Scratch Desktop
Click the File menu and select **Save to your computer**. To open a project, click **Load from your computer**.

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.

Or, hover over the "New Sprite" icon to see more options.

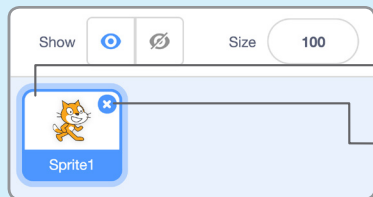*Upload an image from your computer.*

Draw your own sprite.

Click for a surprise sprite!

Choose a sprite from the library.

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

Show   Size   100

Sprite1

First, select the sprite by clicking on its thumbnail in the Sprite List.

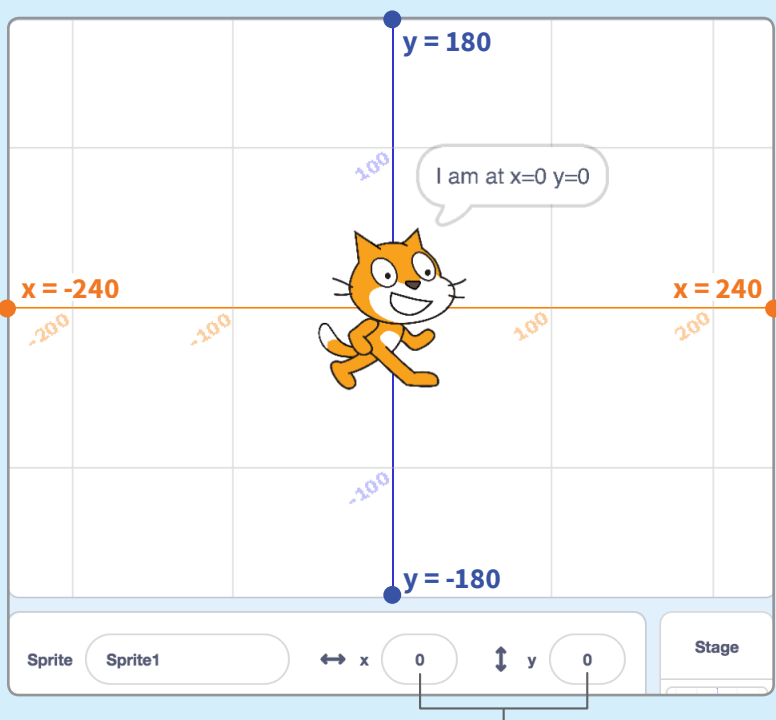*Then, click here to delete the sprite.*

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.

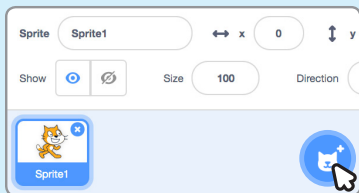At the very center of the stage, **x** is 0 and **y** is 0.

When you move your sprite, you can see its **x** and **y** position change.
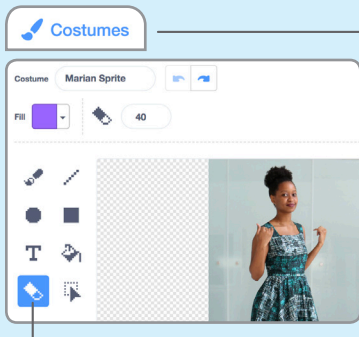
TURN YOURSELF INTO A SPRITE!

There are many ways to create your own sprites and artwork using the Scratch paint tools.
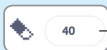
Upload a photo to create a sprite of yourself!

Select **Upload Sprite**.

Choose the photo you'd like to turn into a sprite.

Next click the **Costumes** tab. You will see bitmap tools for editing your image.

Click the eraser icon and use the eraser tool to remove the background from your photo.

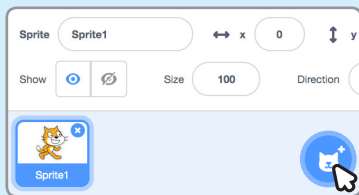**Tip:** you can make the eraser smaller by typing a smaller number.

There are two modes for drawing in Scratch:
1. **Bitmap Mode** allows you to edit images and paint with pixels.
2. **Vector Mode** allows you to create and edit shapes.

DRAW A SPRITE!

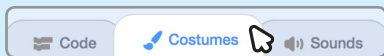Draw your own sprite using the Vector Mode paint tools.

Select **Paint**.

To go back and forth between your code and the paint tools, click the **Code** and **Costumes** tabs.

The Paint Editor gives you a variety of drawing tools. Here are the vector drawing tools:

- move entire objects, or groups of objects

- move a point. Double-click on a line to add a point. Double-click on a point to remove it.

- paint freehand shapes

- erase

- change the color of individual shapes

- add text

- make a straight line

- make a circle or oval
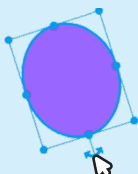
- make a rectangle or square

DRAW A SPRITE!

Start by drawing a simple shape. Use multiple shapes to create a face, an animal or a character. You can create anything!
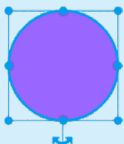
Select the circle tool.
Click and drag to draw a circle.

To rotate a shape, select it, then click the anchor and drag it from side to side.

Click and drag a point to move it.
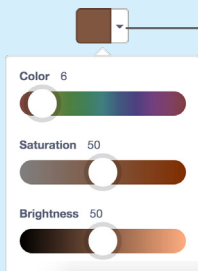Double-click a point to delete it.
Click on a line to add a point.

To paint a shape, click anywhere on the canvas, hold the mouse down and slide it around.

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You can adjust the size of your paintbrush by typing a smaller or larger number.

Color 6

Saturation 50

Brightness 50

To change the color of a shape, click this arrow, then use the sliders to adjust the color.
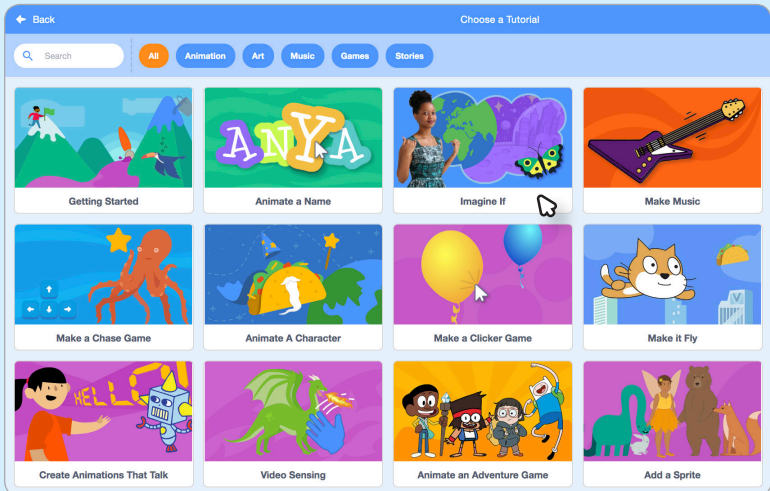
TUTORIALS

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.
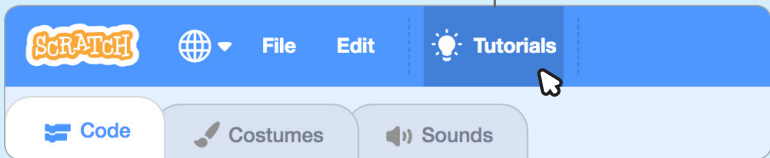
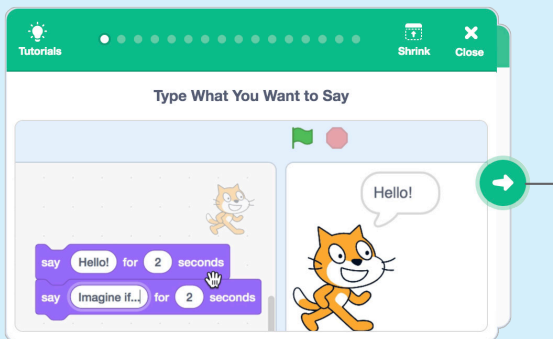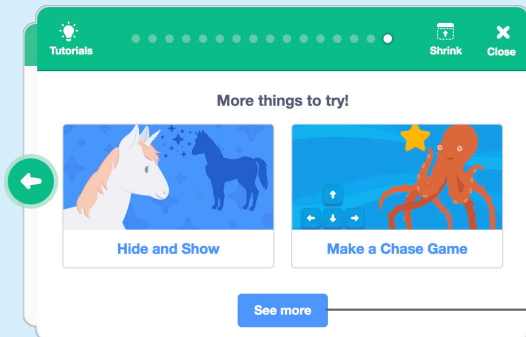Click on the **Imagine If** tutorial to select it.

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.

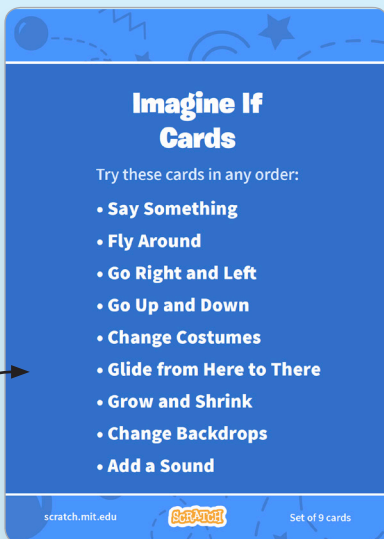
Click here to see all the Tutorials.

CODING CARDS

The Scratch **Coding Cards** provide another way to learn to create projects with Scratch. The cards can be printed, or viewed as a PDF.

The **Imagine If** set of cards starts with a title card, which shows you what you can create.

Examples of what you can create

Imagine If Cards

Try these cards in any order:

- **Say Something**
- **Fly Around**
- **Go Right and Left**
- **Go Up and Down**
- **Change Costumes**
- **Glide from Here to There**
- **Grow and Shrink**
- **Change Backdrops**
- **Add a Sound**
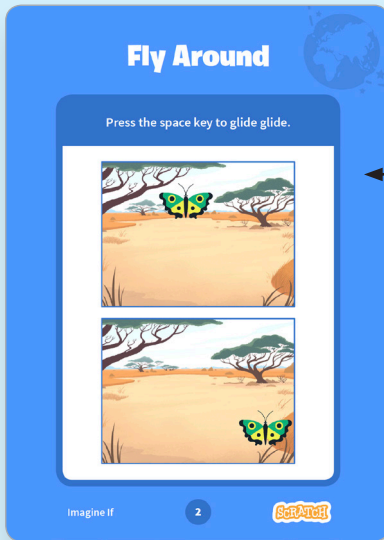
A list of all the cards in this set

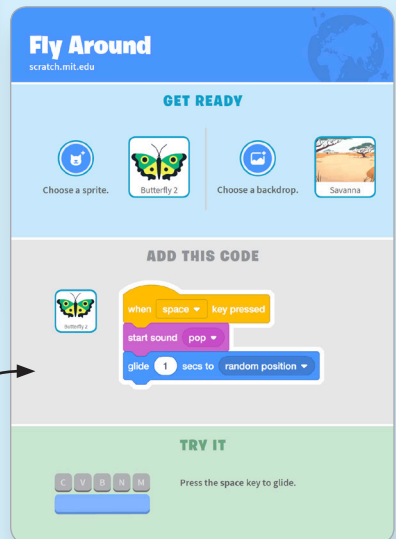The back of the title card lists all the cards for that set.

HOW TO USE THE CODING CARDS

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!

The front of each card shows you what you can create.
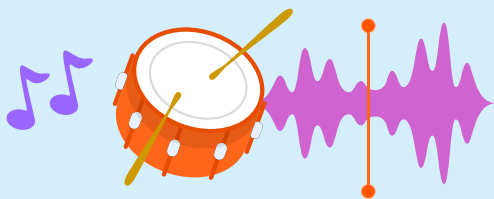
The back shows you how to do it.

GET CREATIVE!

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

You can choose or draw your own characters.

Choose a sound or record your own.

Try changing numbers or adding blocks to your code to see what happens.

Experiment and customize your project however you want!