



Scratch Jr

By snapping together graphical programming blocks, pupils can make characters move, jump, dance, and sing.

In the process, pupils learn to solve problems, design projects, and express themselves creatively.

They also use math and language in a meaningful and motivating context, supporting the development of early-childhood numeracy and literacy.

Scratch Jr. A Complete Overview

Scratch Jr. A complete overview to coding with Scratch and how to implement basic coding structure to your coding lessons.

This Activity will teach students about some of the basics of Scratch Junior. By the end of this activity, students will be able to animate characters, display messages. The possibilities are endless.

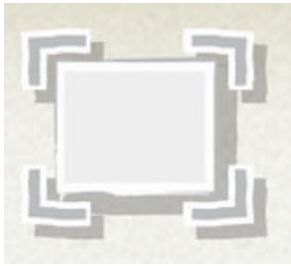
Let's get started with Scratch Jr...

Becoming familiar with Scratch Jr Interface



The above image is the default screen when you start a new project.

Presentation Mode



Expand the stage to the full screen.

Save



Save the current project and exit to the home page.

Grid



Toggle on (and off) the x-y coordinate grid.

Change Background



Select or create a background image for the stage.

Add Text



Write titles and labels on the stage.

Reset Characters



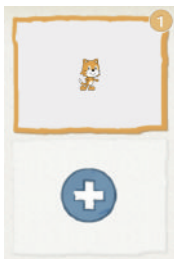
Reset all characters to their starting positions on the stage. (Drag characters to set up new starting positions.)

Green Flag



Start all programming scripts that begin with a “Start on Green Flag” block by tapping here.

Pages



Select among the pages in your project — or tap the plus sign to add a new page. Each page has its own set of characters and a background. To delete a page, press and hold it. To reorder pages, drag them to new positions.

Undo and Redo



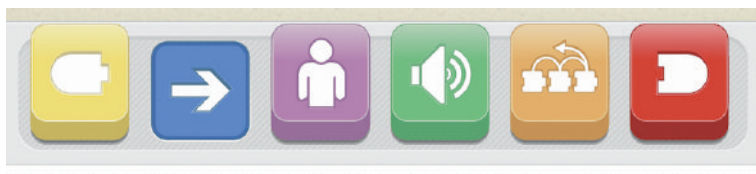
If you make a mistake, tap Undo to go back in time, reversing the action. Tap Redo to Reverse the last Undo.

Blocks Palette



This is the menu of programming blocks. Drag a block into the programming area, then tap on it to see what it does.

Block Categories



This is where you can select a category of programming blocks:

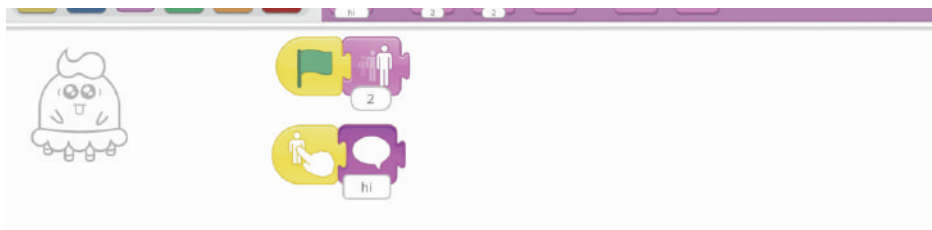
Triggering blocks (Yellow), Motion (Blue), Looks (Purple), Sounds (Green), Control (Orange), End Blocks (Red).

Characters



Select among the characters in your project – or tap the plus sign to add a new one. Once a character is selected, you can edit its scripts, tap its name to rename it, or tap the paintbrush to edit its image. To delete a character, press and hold it. To copy a character to another page, drag it to the page thumbnail.

Programming Area and Programming Scripts



This is where you connect programming blocks to create scripts

Snap blocks together to make a programming script, telling the character what to do. Tap anywhere on a script to make it run. To delete a block or script, drag it outside the programming area. To copy a block or script from one character to another, drag it onto the character's thumbnail.

Scratch Jr Animations and Blocks Descriptions

Triggering Blocks



Start on Green Flag

Starts the script when the Green Flag is tapped.



Start on Tap

Starts the script when you tap on the character



Start on Bump

Starts the script when the Green Flag is tapped.



Start on Message

Starts the script when you tap on the character



Send Message

Starts the script when the Green Flag is tapped.

Motion Blocks



Move Right

Moves the character a specified number of grid squares to the right.



Move Left

Moves the character a specified number of grid squares to the left.



Move Up

Moves the character a specified number of grid squares up.



Move Down

Moves the character a specified number of grid squares down.



Turn Right

Moves the character a specified number of grid squares down.



Turn Left

Rotates the character counterclockwise a specified amount. Turn 12 for a full rotation.



Hop

Rotates the character counterclockwise a specified amount. Turn 12 for a full rotation.



Go Home

Resets the character's location to its starting position. (To set a new starting position, drag the character to the location.)

Looks Blocks



Say

Shows a specified message in a speech bubble above the character.



Grow

Increases the character's size.



Shrink

Decreases the character's size



Reset Size

Returns the character to its default size.



Hide

Fades out the character until it is invisible.



Show

Fades in the character until it is fully visible.

Sound Blocks



Pop

Plays a “pop” sound



Recorded Sound

Plays a sound recorded by the user.

Control Blocks



Wait

Pauses the script for a specified amount of time (in tenths of seconds).



Stop

Stops all the characters' scripts.



Set Speed

Changes the rate at which certain blocks are run.



Repeat

Runs the blocks inside a specified number of times.

End Blocks



End

Indicates the end of the script (but does not affect the script in any way).



Repeat Forever

Runs the script over and over.



Go To Page

Changes to the specified page of the project.

Let's create a Scratch Jr activity

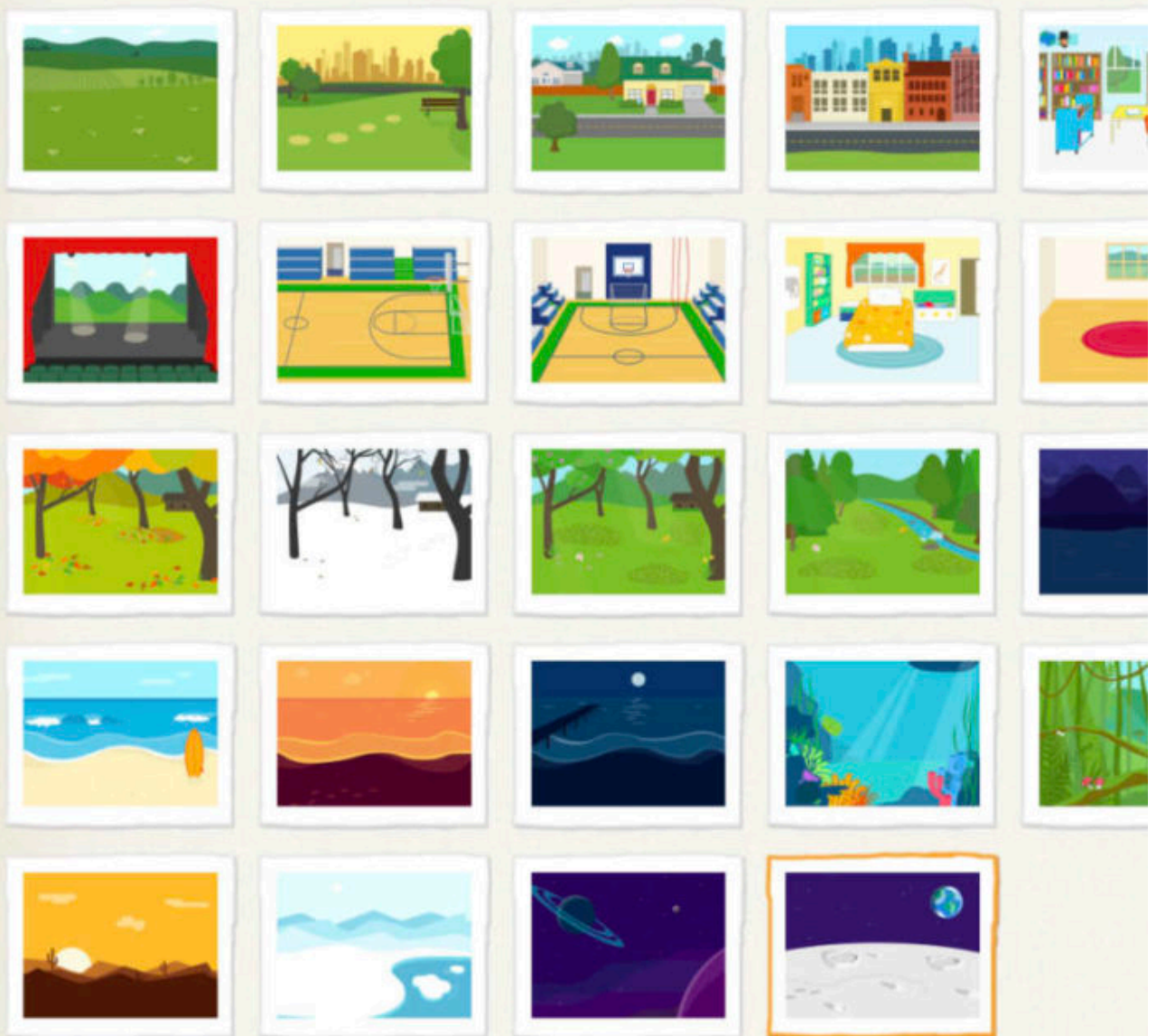
Choosing a stage background

Choose a background for your game by clicking on the "Change Background" button.

For this example, we'll be using the Moon background



Moon

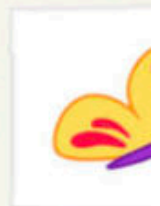
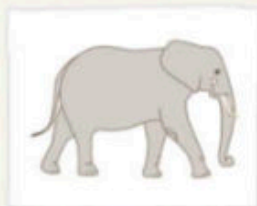
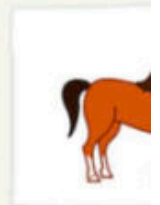
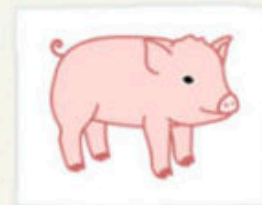
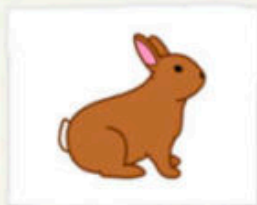




Cat



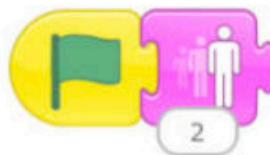
Cat Walking



Add some additional characters to your game by choosing the + Button on the left hand side.

We can change the size of our characters, to give the illusion of depth of field.

By using the green flag button found in the yellow menu and a shrink button found in the magenta menu.





Add messages for each of your characters when they are touched using the yellow “When Touched” button and the magenta speech bubbles.

Add some animations to the characters after they have finished talking, for example, we’ll be adding a “jump” animation to our character once they have spoke.





When you have adding various animations to your character, you can view your game in full screen to see if it works by pressing the “Presentation Mode”

Congratulations...

You have now created an interactive game for your pupils. There are plenty more resources on the [Scratch Jr Website](#).

Additionally, you can check out our other resources on various other apps to [enhance your classroom experience](#).

[Read More](#)
