APPENDIX B
REFERENCE GUIDES

This appendix provides additional information about the ScratchJr programming blocks and the paint editor. The "Block Reference" describes the ScratchJr blocks in all six categories. The "Paint Editor Reference" provides an explanation of all the features of the ScratchJr paint editor.

BLOCK REFERENCE

Here's a breakdown of all the blocks that are available in
ScratchJr and what they do.

Triggering Blocks		
Block	**Name**	**Description**
	Start on Green Flag	Starts the script when the Green Flag is tapped.
	Start on Tap	Starts the script when you tap the character.
	Start on Bump	Starts the script when the character is touched by another character.
	Start on Message	Starts the script whenever a message of the specified color is sent.
	Send Message	Sends a message of the specified color.

Motion Blocks

Block	Name	Description
	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	Rotates the character clockwise a specified amount. Turn 12 for a full rotation.
	Turn Left	Rotates the character counter-clockwise a specified amount. Turn 12 for a full rotation.
	Hop	Moves the character up a specified number of grid squares and then down again.
	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

Block	Name	Description
	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 visible.
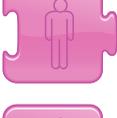
Sound Blocks

Block	Name	Description
	Pop	Plays a "pop" sound.
	Play Recorded Sound	Plays a sound recorded by the user.

Control Blocks

Block	Name	Description
	Wait	Pauses the script for a specified amount of time (in tenths of seconds).
	Stop	Stops all of a character's scripts on the page.
	Set Speed	Changes the rate at which certain blocks are run.
	Repeat	Runs the blocks inside its loop a specified number of times.

End Blocks

Block	Name	Description
	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.

PAINT EDITOR REFERENCE

You can use the paint editor to draw your own characters and backgrounds or to customize existing ones.

Undo the most recent change.

Redo the most recent undo.

Save changes and leave the paint editor.

Character

Edit the **character name**.

choose a **shape** to draw: line, circle, rectangle, or triangle.

change the **Line width** for your drawing.

select a **color** to use for drawing and filling in shapes.
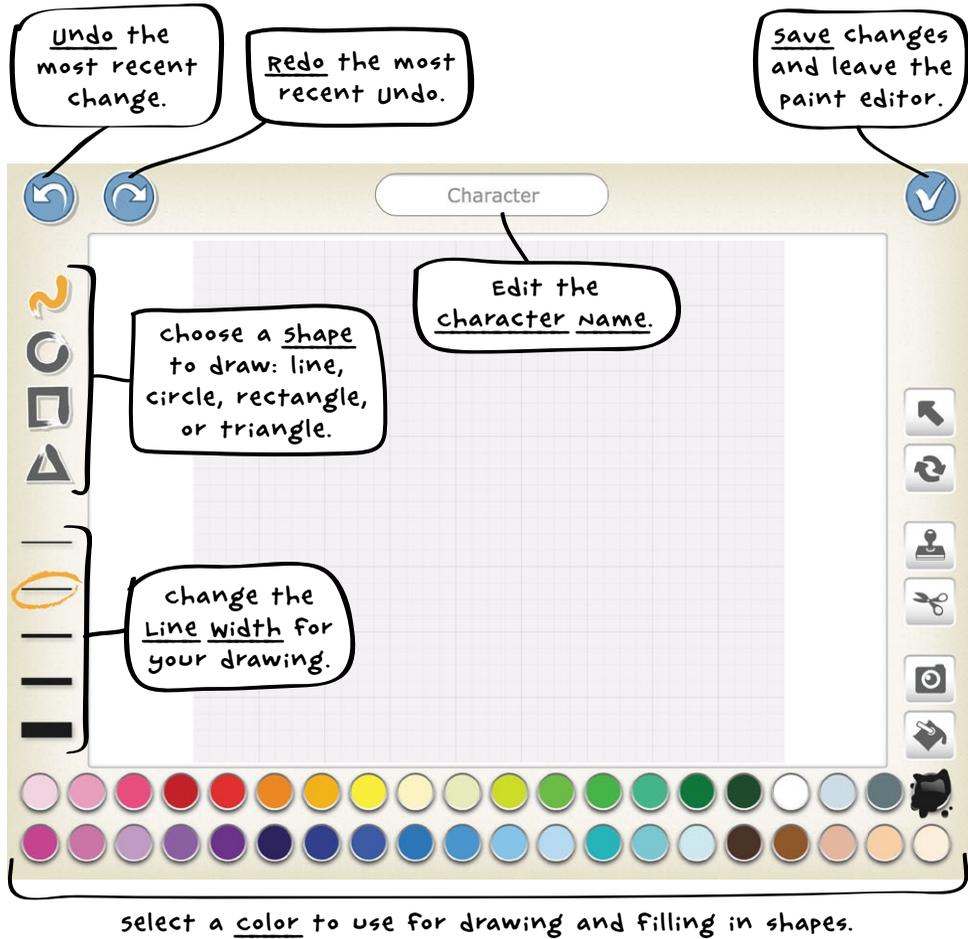
Paint Editor Tools		
Tool	**Name**	**Description**
	Drag	To move a character or shape on the canvas, select the Drag tool and drag the character or shape into place. When you tap a shape, small dots will appear, and you can drag these dots to alter the shape.
	Rotate	To turn a character or shape, select the Rotate tool, tap the character or shape, and drag your finger over the screen to rotate it around its center.
	Duplicate	To make a copy of something, select the Duplicate tool, and then tap the character or shape.
	Cut	To delete an item, select the Cut tool, and then tap the character or shape you want to delete.
	Camera	If you want to add a photo to your background or character, tap the Camera tool, and then tap the area or shape that you want to put the picture in. Then tap the Camera button to take a picture. Your picture will fill only the area or shape you selected.
	Fill	To color an object, select the Fill tool, choose a color, and then tap the area you want to fill with that color.

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—Boing Boing