

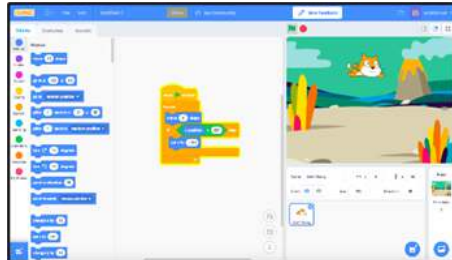
Computing

Events and Actions in Scratch

Overview

Programming means creating instructions for a computer to follow.

Scratch is a coding program that lets us make our own stories, games, and animations.

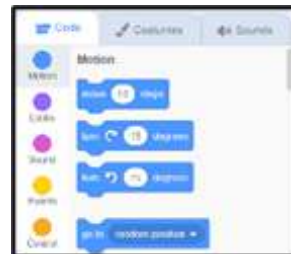


We can use event and action blocks to tell sprites what to do when something happens (like clicking the green flag).

Algorithms are step-by-step instructions. In Scratch, we use them to order movements, sounds, and actions so our animations work properly.

Scratch Basics

Blocks Palette (left side): This area holds all the coding blocks. The blocks look like puzzle pieces and give instructions for your animation.



Code Area (middle): This is where you drag and join blocks together to build your program.

Stage and Sprite (right side): The stage is where you see what happens in your program. The sprite is the character or object that carries out the actions.

Pictograms and block diagrams

Event Blocks (yellow): These blocks start things off. They tell the program when something should happen, like when the green flag is clicked, a key is pressed, or a sprite is tapped. Every Scratch project needs an event block to get going.

	Putting this at the beginning of your sprites programming will mean the program will only start when the green flag is clicked.
	This will begin a sprites actions when the selected key from the drop down bar is pressed. The drop down bar allows you to select any key on the computer keyboard. Meaning you can control your sprites movements by setting up movements in connection with different keys.
	A sprites actions will start when you click on it. For example: If that picture was the correct answer to a question you could get it to move.
	This will start a sprites action when the backdrop changes. Using the drop down bar you can select any backdrop you have in the selected backdrop library for your program. For more info on backdrops see page on creating and selecting backdrops.

Action Blocks: These blocks control what happens after an event.

Motion (blue): Move the sprite around.

Sound (pink): Play sounds or music.

Looks (purple): Change the sprite's appearance.

Motion 	Looks 	Sound
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Key Questions

What is an algorithm?

A step-by-step set of instructions.

Where can you find all the coding blocks in Scratch?

In the Blocks Palette (left side).

Where do you drag and connect blocks to build your program?

In the Code Area (middle).

What colour are Event Blocks?

Yellow.

Why does every Scratch project need an event block?

To tell the program when to start.

What do Motion blocks make the sprite do?

Move around.

What do Sound blocks do?

Play sounds or music.

What do Looks blocks change?

The sprite's appearance.

True or False: A sprite can't do anything until an event block tells it when to start.

True.

Key Vocabulary

Motion Event Logic Move
 Resize Extension block Pen Action Errors Test