


Year: 3  
 Term: Summer 1  
 Topic: Programming - Events and Actions



**What is Scratch Jr?** Scratch is a website/app that lets us code our own stories, games and animations.

The Blocks Palette contain all of the different blocks: puzzle piece commands which control the animation.

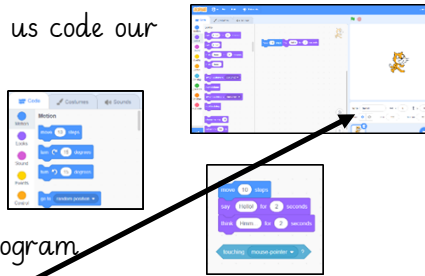
Code Area is where the blocks are placed to create a program.

 Stage with Sprite is where the output of the program is presented. The sprite is the character.

**Adding/Removing Sprites:** This can be done here, at the bottom of the stage. There are many sprites to choose from here.

**Attributes:** There are three attributes of the sprite which we can change to make our animation: Code, Costumes, Sounds.

**Backdrops:** Backdrops can be added by clicking on this icon (bottom right of the screen, below the stage).



## Glossary

- actions** Things the computer does, like moving or changing something.
- algorithm** A set of instructions to perform a task.
- blocks** Pieces of code that fit together to make a computer do something.
- programming** This is when we make a set of instructions for computers to follow.
- sequence** A pattern or process in which one thing follows another. (In Scratch, blocks can stack vertically on top of one another to create sequences.)

## Events and Action Blocks

**Event Blocks:** Event blocks are yellow and are used to sense different events that happen, e.g. the green flag being clicked.

**Action Blocks:** Action blocks include 'Motion' blocks (blue), 'Sound' blocks (pink) and 'Looks' blocks (purple). They make the sprite move, make sounds and change appearance when the event is triggered.

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 back drop 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.

**Motion**

**Looks**

**Sound**

## Trialling and Debugging

Programmers do not put their computer programs straight to work. They **trial** them first to find any errors:

**Sequence errors:** An instruction in the sequence is wrong or in the wrong place.

**Keying errors:** Typing in the wrong code.

**Logical errors:** Mistakes in plan/thinking.

If your algorithm does not work correctly the first time, remember to **debug** it.

