

Computing – Programming Programming 1: Music

What I should already know: Loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times. Coding is writing in a special language so that the computer understands what to do. The character in Scratch is controlled by the programming blocks. You can write a program to create a musical instrument or tell a joke. Scratch is a programming language and I already know some of its functions. I understand how to use loops to improve programming. I understand how decomposition is used in programming. I understand that you can remix and adapt existing code.

Enquiry Questions

- How can we tinker with Scratch music elements?
- How can we create a program that plays themed music?
- How can we plan a soundtrack program?
- How can we program a soundtrack?
- How can we program music for a specific purpose?

Key Vocabulary

Basic commands – The simplest instructions that can be used.
Bug – A mistake or error in the code, stopping the program from working as intended.
Computer code – A set of instructions written in programming language, to tell a computer what to do.
Code (verb) – To write in programming language (code).
Code block – A visual representation for a section of code that performs a certain job. They can be snapped together to build a program.
Debug – To remove and repair the error or mistake in computer code.
Error – A mistake or a fault in software.
Live loop – Like loops, but instead of repeating a number of times, they go on forever. You can also have multiple running at the same time.
Loop – A repeated sequence of instructions.
Pitch (music) – A musical term which refers to how high or low a note is.
Program language – The particular library of code which a piece of software is written in, for example Java and C ++.
Rhythm – A musical term that refers to the ‘pattern’ of long and short notes.
Scratch – A coding program, in which you can develop interactive games and animations.
Sprite – Visual objects that can be manipulated through code, for example to move, respond, appear or disappear.
Soundtrack – A music recording that accompanies a film or TV show.
Tempo (music) – A musical term which refers to the speed of the music.
Timbre (music) – A musical term which refers to the speed of the music.

Computing Skills

Pupils will:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Scratch 'create' interface

Block Palette

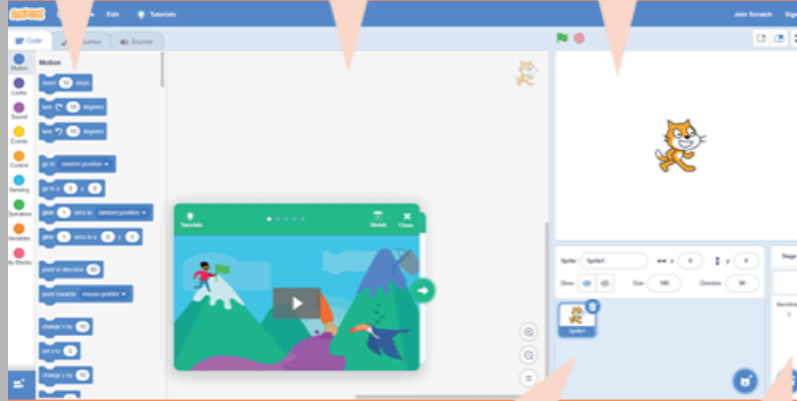
This is where you choose the blocks to use.

Scripts Area

This is where you create your program.

Stage

This is where you see your program in action.



Sprites

This is what characters or objects are called in Scratch

Backdrop

Backgrounds for your project.

Scratch code blocks colour key

	Motion		Events		Operations
	Looks		Control		Variables
	Sound		Sensing		My Blocks

Links to other curriculum areas: Music - composing