



Respect, Believe, Achieve

Year 5

Digital Music Creation and Physical Computing

Using ICT



Key Words

Multi-tracking

Multi-tracking is used when recording music to layer different sounds.

Sampler

An electronic device that digitally encodes and stores samples of sound.

Sequence

The following of one musical element after another.

Micro:bit

A small computer chip on board with LED lights, sensors and buttons that we can write programs for

Outputs

Data that comes out of a computer. On a Microbit this is the grid of LED lights that we can program to turn on and off.

Inputs

Data that goes into a computer, on a Microbit these are the buttons that can be programmed

What do I already know?

- Create ascending and descending scales.
 - Add chords evenly across the scales.
 - Add arpeggios and melodies.
 - Add a steady and even rhythm.
 - Use sampled sounds to create an effective mix.
 - Build beats, melody (tones) and effects.
-
- Program inputs with loops, selection and sensing for interactions.
 - Work with variables and various forms of input and output.
 - Debug programs that accomplish goals. (correcting errors)
 - Use selection, data variables and operators.
 - Program a virtual robot using Scratch blocks.

Our Learning Steps

1. Multi-tracking and effects

Multi-tracking is used when recording music to layer different sounds (e.g instruments) and adjust the volume and effects of each track.



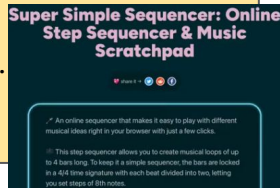
2. Samplers and sequences

Use various online samplers and sequences to create drums patterns and scales.



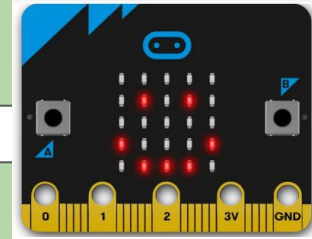
3. Scales

Use the Muted IO Sequencer to create scales (a sequence of musical notes in a key signature).



1. Inputs and outputs

Understand that computers use physical inputs and outputs and give examples.



2. Program

Program physical inputs, outputs and random variables. Label parts of a Micro:bit.



3. Design

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.