Question: Can you make a piece of music?

Programming A-sequencing sounds.

National Curriculum Link:

- -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

International Baccalaureate Learner Profile Link:

Communicators.

How do we express and present ourselves to others? How can we communicate with others?

We can be clear in both written and oral form?

Reflective

Remaining open to continuous learning.

Striving to be accurate and precise.

Strive to not be complacent.

Balanced.

To understand the impact on my mind, body and emotions.

Understanding the impact on others.

Prior Skills: Year 2

To choose a series of words that can be enacted as a sequence.

To explain what happens when we change the order of instructions.
To choose a series of commands that can be run as a program.
To trace a sequence to make a prediction.
To test a prediction by running the sequence.

New Skills: Year 3

To explain that programs start because of an input. To explain what a sequence is.

To build a sequence of commands.

To combine commands in a program.

To order commands in a program.

To create a sequence of commands to produce a given outcome.

To identify that different sequences can achieve the same output.

To identify that different sequences can achieve different outputs.

Future Skills: Year 4

Knowledge, Skills and Understanding

To use technology to collect, sort and display information that could include data, photos, video or sound.

To learn about saving work in a special place and retrieve it again.

To learn and access different types of media content on their device. Including; sound, images, books, podcasts/ audiobooks and video via the web.

To use a computer to sequence short pieces of music using a small selection of prerecord sounds.

Challenge

Resources: https://www.bbc.co.uk/teach/class-clipsyideo/computing-ks2-sequencing/z6cbydm (sequencing) https://www.twinkl.co.uk/resource/tp-i-0112-planitcomputing-year-1-programming-with-scratchir-lesson-5sounds-lesson-pack https://www.theschoolrun.com/what-is-a-sequence-incomputing (video)

	Extended Writing Opportunities:
	Can you make a representation of a different instrument? Can you write instructions on how to use a sprite to make music?
Vocabulary: Computer, application, sprite, motion blocks, sequence, commands, sound, ordering.	Numeracy skills: Estimation of number of steps/instructions. Use of turns for commands.
Suggested Quality Texts: See selection in library.	WOW Experience: To plan to perform their pieces/sequences of music for other year group to celebrate.

Cross Curricular Links:

Art and DT: Design and make musical instruments to match those on the computer. History: To look at older musical instruments to influence the sequences.