Question: Can you make a sprite move? Programming-Introduction to animation.

National Curriculum Link:

- -Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions
- -Create and debug simple programs
- -Use logical reasoning to predict the behaviour of simple programs

International Baccalaureate Learner Profile Link:

Knowledgeable.

What do I know already? I can share my knowledge with others. I apply what I know to new situations and opportunities.

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?

Prior Skills: Reception

Understanding the World: Technology.

Early Learning Goal: Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

New Skills: Year 1

To enact a given word.

To recall words that can be enacted.
To predict the outcome of a command on a device.
To list that commands can be used on a given device.
To explain what a given command does.
To match a command to an outcome.
To recognise how to run a command (press a button).
To choose a command for

a given purpose.
To understand that a program is a set of commands a computer can run.

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

Future 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.

To recall that a series of instructions can be issued before they are enacted. To choose a series of commands that can be run as a program.	
To run a program on a device.	

Knowledge, Skills and Understanding

- -To explore algorithms and sequencing of instructions.
- -To read, follow and create a simple sequence algorithm.
- -To give these instructions so that they can be executed by a robot with the aim of successfully reaching a destination.
- -The children learn: to create a simple program and correct mistakes (debug).

Challenge

Resources: Hardware: iPads,	Websites or Apps:	
Computers, Bee Bots. Teach computing website and	Apps: Scratch Jr, Kodu.	
plans.	https://www.topmarks.co.uk/Search.aspx? q=crack%20the%20code (code games)	
	https://www.bbc.co.uk/bitesize/topics/z3tbwmn (algorithms)	
	Extended Writing Opportunities: Write a set of instructions for their partner to solve (treasure hunt).	
Vocabulary: Command, device, sequence, forwards, backwards, right, left, turn, debug, programs, solutions, algorithms, sprites.	Numeracy skills: Data collecting: The children will be collecting information using a tally system and then sharing the information in different forms, including bar charts and pie charts.	
Suggested Quality Texts: See selection in library	WOW Experience:	
Cross Currienter Links	<u>l</u>	

Cross Curricular Links:

Art- Design a sprite and animation to move on same or different instructions.