

## Iprogram

### What I should already know

- I should know everyday items that perform an action after getting an instruction.
- I should know how to program something to make it move.
- I should know how to plan, test and debug a set of instructions.
- I should know how to give directional commands.

### What I will learn (Sticky knowledge)

- I can understand algorithms can be followed by humans and computers
- I can understand that algorithms are made up of steps and repeated steps.
- I can program a simple animation with movement.
- I can write a simple program that produces output (text or sound).
- I can combine images and text to create a simple animation

### What I will learn next

In year 3 I will learn..

- To program an animation that executes a sequence of statements.
- To understand that computer programs containing graphics use x y coordinates and turns are measured in degrees.
- To program a sequence of instructions that create visual effects.
- To import, create and record sounds
- To predict the outcome of a simple algorithm.
- To combine images, sounds and movement to create a personal animation

### Isafe Learning

I will learn...

- To understand that personal information is unique to myself.
- To understand that personal information should only be given to trusted adults.
- To begin to identify the characteristics of people who I can trust and who can help me make choices that keep me safe.
- To understand that my emotions can be a tool to help me judge unsafe situations.
- To understand the importance of checking with an adult before participating in an online environment

### Key Questions

What is an algorithm?



A set of instructions that are followed to achieve a task

How do we give computers instructions?



In 'code'. Instructions given in a language computers can understand

What does debug mean?



Fixing problems in computer programs

Which Scratch blocks would you use repeat an action?



### Key Vocabulary

Algorithm	A set of steps to finish a task.
Debug	Finding and fixing problems with an algorithm or a program.
Instruction	How something should be done.
Internet	The biggest network (connected computers) in the world.
Online	Using the internet or available on the internet.
Personal Information	Information that belongs to you.
Program	An algorithm that has been written in a language (coded) that a computer can understand.
Repeat	The action of doing something over and over again.
Sequence	A particular order to follow.
Test	Run a program to see if it does what you expect it to do.
Trusted adult	An adult you can rely on for help and support.
Trustworthy	Something or someone you can rely on.
Untrustworthy	Something or someone that can not be relied upon.

