

What I should know already...


In year 1, the children learnt what an algorithm is. They were able to write their own instructions for a beebot trial. They tested and debugged their programme. They were then able to apply their learning to an on screen turtle, using the same coding process.



Key Skills

To understand the coding cycle.	Children to investigate the code, test, debug cycle, They may do this with real life examples-giving sets of instructions to do different tasks.
To use a turtle to create, test and debug an algorithm.	Children are to draw on year 1 skills to create a program using Purple Mash 2 Go.
To introduce sprites and designs.	Children will investigate a sprite on screen. Can they change their sprite and background?
To investigate coding blocks.	Work through the 2 code chimp programs to investigate the different coding blocks. Look at motion, sounds and hide features.
To use coding blocks to create an algorithm that performs a task.	Use 2 code chimp to create algorithms for a purpose.
To test and debug.	Use 2 code chimp to test and debug. Use the hint stars to give extra support.

Hardware and software

2 Go challenges 6-8 
JIT turtle Year 1 example on J2E
 2 code chimp: Fun with fish, bubbles, air traffic control, snail race, vehicles, turtle, haunted scene, guard the castle.

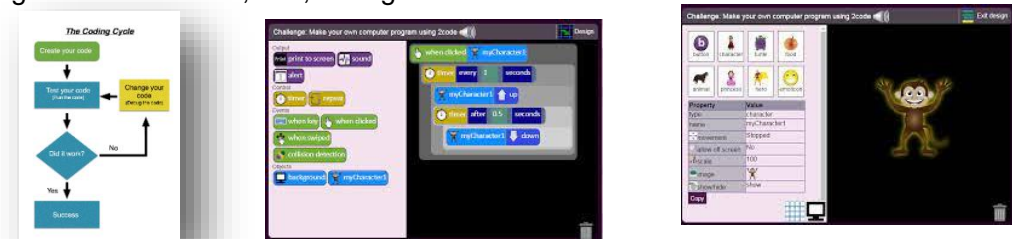
Key Vocabulary	
Motion	Movement of an object.
Control	Give an object instructions to make it move.
Direction	Forwards or backwards.
Turn	Left or right.
Appear	Make something come on to the screen.
Hide	Make an object disappear.
Features	The way an object looks.
Algorithm	A set of instruction given to a computer.
Text String	A string of instructions.
Test	Check the algorithms work.
Debug	Find errors in the algorithms to make the code work.
Loop	To repeat the code.

National Curriculum

The children will: 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
 Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Real World

Use 2 code chimp to create an air traffic control, which helps the planes fly in the right direction- code, test, debug.



Useful websites

- <https://www.thinkuknow.co.uk/> If you want to know more about staying safe online
- www.hursthillprimaryschool.com/unify Hurst Hill unify site to access emails and applications
- www.hursthillprimaryschool.com The school website
- <https://www.purplemash.com/login/> Purple mash login– look up the schools log in page using the post code WV14 9AJ
- <https://www.childnet.com/> SMART rules

Online safety

I can describe how to behave online in ways that do not upset others and can give examples.
 I can explain rules to keep us safe when we are using technology both in and beyond the home.
 I can give examples of some of these rules.