| Computing | Year 4 | Autumn | Curriculum | Code– motions, looks, draw and sounds |

Hurst Hill Primary School
Learning Together

What I should know already...

In year 3, children will have learned to write an algorithm to make a sprite move around the screen. They will be able to change directions and pen colours.
Using 2code the children will know how to create timers and be able to create triggers for events to happen. The children will be able to debug a programme.

Key Skills

Use a sequence of inputs to create a variety of outputs. To use different variable to get different outputs.	Can the children use the mouse click, collision tools and proximity of objects to create different outputs e.g. guard the castle.
Use the functions define, set, change, show and hide to control the variables.	Use code blocks to create an algorithm where sprites hide, backgrounds change etc.
To create a sequence of commands.	Use the traffic light programme to create a sequence which is dependent on different inputs.
Use the Reporter operators () + () () - ()	Use co-ordinates to move sprites to different areas of the screen.
To design, write and debug a programme using code blocks given to them.	Incorporate all the year 4 skills from Purple mash to complete the functions programme. Can the children apply the skills learnt in Purple mash to J2E?
To solve problems by breaking them into smaller parts.	Use the J2E examples to create their own code broken down into smaller steps. Can they use variable to create a desired output?

Hardware and software

2 logo Sir Francis's Flags, dream time, get in gear
J2E code- logo basic
2 code gibbon: shapes, random words and wizards, traffic lights, vehicles 2, Guard the castle, genie, switching backgrounds, night and day, Catherine wheel, functions.
J2E year 4 example

purple mash

Key Vocabulary

Control	To make an object do what you want it to
Appearance	The way objects look.
Algorithm	An instruction given to the computer.
Sequence	A set of instructions for the computer to follow.
Test	Check that the instructions do what you want.
Debug	Look for problems in the sequence and change the algorithms.
Logo	An application used to move an object from one place to another.
Reporter operators	Formula given to the computer
Variable	Something that changes
Input	Something done by the person using the computer.
Actions	Something that we make the object do.

National Curriculum

Pupils should be taught to:
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
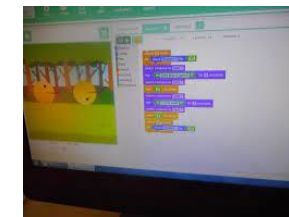Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Real World

Use 2code to sequence a set of traffic lights. Can they use free chimp to create their own set of lights?

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-**J2E and Purple Mash**

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

Online safety

I can describe strategies for keeping my personal information private, depending on context.
I can explain that others online can pretend to be me or other people, including my friends.
I can suggest reasons why they might do this.
I can explain how internet use can be monitored.