St Peter's Roman Catholic Primary School

Computing Year 3 Autumn

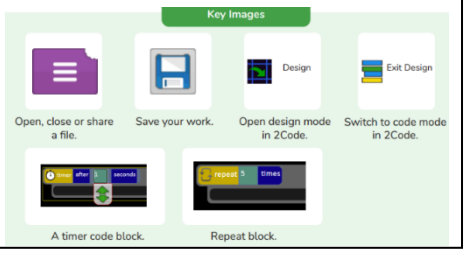
Computer Science: Coding

At the end of this topic, children will know…

- How to design, write and debug programs using an algorithm.
- How to sequence, select and use repetition in various forms on input and output.
- How to be able to explain how an algorithm works and to detect errors to debug.
- How to use the internet and computer networks safely.

Resources on Purple Mash -





Key Questions

What is an algorithm? Why is it useful for coding?
An algorithm is a step-by-step set of instructions used to solve a problem or achieve an objective. A clear algorithm can help you to create code that does what it is supposed to do.
Why is it useful to use a flowchart to design a computer program?
Using a flowchart to design a computer program is helpful as you can see it in its simplest form as inputs and outputs. You can see where the program is going which will prevent mistakes when creating the code.

KEY VOCABULARY

Algorithm (Y2)	A precise step by step set of instructions used to solve a problem or achieve an objective.
Background (Y2)	In 2Code the background is an image in the design that does not change.
Debug (Y2)	Fixing code that has errors so that the code will run the way it was designed to.
Event	An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key or clicking the screen.
Command (Y2)	A single instruction in a computer program
Output	Items in a program that can be given instructions to move or change in some way (action).
Collision detection event	In event when 2 objects have touched each other in coding.
Action (Y2)	Types of commands, which are run on an object. They could be used to move an object or change a property.
Input	Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.