



Concept Map-Computing



Computing Systems & Networks

In Year 3 we will learn...

What is a digital and non-digital device.
What is an input, process & output.
How digital devices are connected to form simple networks, including WAPs and switches

In Year 4 we will learn...

The internet is a network of networks.
The WWW is part of the internet.
Evaluate online content for accuracy and honesty.

In Year 5 we will learn...

How information is transferred between systems and devices.
How to find information on the WWW
How search engines work

In Year 6 we will learn...

How data is transferred over the internet.
How the internet facilitates communication and collaboration.
How to communicate responsibly considering what should and should not be shared on the internet

Data and Information

In Year 3 we will learn...

What a branching database is.
Create a branching database using yes/no questions.
To create physical and on-screen branching databases and test them.
Consider real world applications for branching databases

In Year 4 we will learn...

How and why data is collected over time.
To collect and access data over time.
Use sensors to collect data, which is analysed and reviewed.

In Year 5 we will learn...

How flat-file databases organise information.
How to create graphs and charts from own data.
Use a live database to answer a question and present their work.

In Year 6 we will learn...

How to organise data in a spreadsheet.
How to use formulas to calculate data.
How to use multiple formulas across a range of cells.

Creating Media A

In Year 3 we will learn...

To use a range of techniques to create stop frame animation.
We will create a story animation and add additional media such as sound and text.

In Year 4 we will learn...

How to use digital devices to work with sound digitally.
Create a podcast using multiple tracks and open and save digital audio files.

In Year 5 we will learn...

How to create vector drawings.
How to layer objects using duplication to create more complex pieces of work.

In Year 6 we will learn...

To work within a 3D space to create 3D.
How to create a hollow objects.
How to combine multiple objects to create a model of a desk tidy.

Creating Media B

In Year 3 we will learn...

What is 'text' and 'images'.
Use desktop publishing software to consider font size, colour and type to edit documents.
Learn what 'templates', 'orientation' and 'placeholders' mean. How to create their own magazine cover.

In Year 4 we will learn...

How digital images can be changed and edited, reused and resaved.
To consider the impact that editing images can have and evaluate changes made.

In Year 5 we will learn...

How to create short videos.
How to capture, edit and manipulate video.
How to reflect and assess progress in video production.

In Year 6 we will learn...

Why websites are created and their different uses.
How to design and evaluate their own simple website.

Programming A

In Year 3 we will learn...

How to use block coding using Scratch.
How to use different coding blocks to sequence motion, sounds and events. How to apply stages of program design.

In Year 4 we will learn...

To use repetition and loops to plan, modify and test commands that create shapes and patterns.
To use text based programming language.

In Year 5 we will learn...

How to program physical components using Crumble controllers, LED's and motors.
How to use existing block coding knowledge in a new programming space.

In Year 6 we will learn...

To explore variables in programmable games.
How to create a scoreboard and then modify and create their own game using variables in Scratch

Programming B

In Year 3 we will learn...

The links between events and actions in Scratch.
How to change sprite sizes and move them around a maze.
How to design and build their own maze tracing program.

In Year 4 we will learn...

To use block-based coding to explore repetition.
The difference between count-controlled loops and infinite loops.
To design and create their own game using repetition

In Year 5 we will learn...

How to use 'if...Then...Else' blocks to select different outcomes depending on whether a condition is true or false.
How to use existing programming knowledge to create a quiz.

In Year 6 we will learn...

How to use a physical device to sense movement.
How to code a Micro:Bit as a step counter using existing programming knowledge.
How to apply block coding knowledge in a new programming space.