



### Hardware

### Networks and data representation

### Computational thinking

### Programming

EYFS

Learning about a range of hardware.

Year 1

Learning about inputs and outputs and how they work.

Year 2

Understanding what hardware does and how we can make it work.

Year 3

Learning how hardware can work together.

Year 4

Finding out about routers.

Year 5

Learning about ROM and RAM.

Year 6

Designing a computer of the future and understanding QR codes.

Understand what internet is.

Identify key components of a network.

Understand that networks share information.

Use the language of data e.g. binary.

Understand that networks provide multiple services.

Read simple instructions.

Programing and debugging.

Using decomposition, abstraction and algorithms.

Explore decomposition, abstraction and algorithms.

Using decomposition, abstraction and algorithms for a range of purposes.

Using decomposition without support and writing more complex algorithms.

Using decomposition, abstraction and algorithms even more complex algorithms for a purpose.

Learning an algorithm is a set of instructions.

Programing and debugging.

Using algorithms and loops.

Use logical thinking to debug issues.

Coding a game and remixing code.

Writing and debugging your own code.

Use, remix and evaluate.



### Using software

### Using email and the internet

### Using data

### Wider use of technology

EYFS

Using an online paint tool.

Finding images with the teacher's help.

Sorting and showing a range of data.

Year 1

Editing images using different software.

Finding and downloading images.

Representing data in a range of ways.

Recognising common ways we use technology.

Year 2

Using word and creating animations.

Understanding information is personal and being respectful online.

Inputting data into a spreadsheet.

Learning how computers are used in the wider world.

Year 3

Using video to tell a story and then edit it.

Learning how to send and receiving an email.

Creating charts and graphs and retrieve information.

Understanding emails, learning about search engines and how social media interacts.

Year 4

Creating your own webpage and work with others online.

Understanding how to find information and that it might not be true.

Designing a weather station to gather data,

Understand that software can be used to work together.

Year 5

Making music, editing videos and creating 3D designs.

Developing searching skills and understanding personal information on apps.

Understand how data is collected.

Understand about different communication in technology.

Year 6

Creating a presentation using word and using editing skills in videos to a greater level.

Understanding how search engines work.

Gathering data in real time and creating formulas to sort data.

Learning about 'big data' and how it can be used.



## E-Safety

## Wellbeing

EYFS

Learning how to log in/log out.

Learning what to do if you come across something that worries you with an adult.

Year 1

Logging in and out learning top tips for being safe online.

Learning what to do if you come across something that worries you.

Year 2

Learning about personal information.

Learning how to be respectful online.

Year 3

Learning about cyberbullying and about fake information online.

Learning how to be a responsible digital citizen and recognising unkind behaviour.

Year 4

Learning about trustworthy sources of information and advertisements.

Recognising appropriate behaviours when working with others online.

Year 5

Learning about communication and permissions online.

Consider the effects of screen-time on mental and physical health

Year 6

Understanding secure passwords, software updates and collecting evidence of bullying.

Consider your digital footprint and future implications.