



As a Year 4 Computer Scientist I will know...

Computing systems and networks - The Internet

to describe how networks connect to other networks
 to outline how information can be shared via the WWW
 to recognise the need for security on the internet
 to describe how to access the WWW
 to explain that the WWW comprises of websites and web pages
 to describe the current limitations of WWW media
 to evaluate the reliability of content and consequences of unreliable content
 to explain the benefits of the WWW

Creating media - Audio editing

to identify that sound can be recorded
 to identify that an input device is needed to record sound
 to identify that output devices are needed to play audio
 to recognise that recorded audio can be stored on a computer
 to recognise that audio can be edited
 to recognise that sound can be represented visually as a waveform
 to recognise that audio can be layered so that multiple sounds can be played at the same time
 to consider the results of editing choices made

Creating media - photo editing

To use an application to change the whole of a digital image to change the composition of a digital image by rotating, flipping, cropping, adjusting colours, applying filters and adding effects
 to use an application to change part of a digital image by selecting parts of the image, cloning, copying and pasting to change the composition and to retouch.
 to use an application to add to the composition of a digital image by adding text

Data and information - Data Logging

To suggest questions that can be answered using a table of data.
 To identify data that can be logged over time.
 To identify that sensors are input devices.
 To recognise that a sensor can be used as an input device for data collection.
 To explain that a data logger captures data points from sensors over time

Programming A - Repetition in shapes

To relate to what repeat means
 To identify everyday tasks that include repetition
 To explain that we can use a loop command in a program to repeat instructions
 To identify patterns
 To identify a loop within a program
 To explain that in programming there are indefinite loops and count-controlled loops
 To explain that an indefinite loop will run until the program is stopped
 To explain that you can program a loop to stop after a specific number of times.
 To identify patterns in a sequence
 To explain the importance of instruction order in a loop
 To recognise that not all tools enable more than one process to be run at once

Project Evolve

self image and identity
 online relationships
 online reputation
 online bullying
 managing online information
 health, wellbeing and lifestyle
 privacy and security
 copyright and ownership



As a Year 4 Computer Scientist I can...

Computer Networks and printers

- Describe how a computer network connects to other networks
- outline how information can be shared via the World Wide Web
- describe how to access the World Wide Web
- explain that the World Wide Web comprises of websites and web pages
- evaluate the reliability of content and the consequences of unreliable content
- explain the benefits and potential dangers of the World Wide Web

- Audio production
- Record a sound using a computer
- Play recorded audio
- Import audio into a project
- Delete a section of audio
- Change the volume of tracks in a project

Programming A

List an everyday task as a set of instructions including repetition

Use an indefinite loop to keep producing a given output

Use a count controlled loop to produce a given outcome

Plan a program that includes appropriate loops to produce a given outcome

Recognise tools that enable more than one process to be run at the same time

Create two or more sequences that run at the same time



As a Year 4 Computer Scientist I can...

- Photo editing
- Recognise that digital images can be manipulated
- Recognise that digital images can be changed for different purposes
- Choose the most appropriate tool for the particular purpose
- Consider the impact of changes made on the quality of the image

Project Evolve

Data and Information - Data Logging

- To use a digital device to collect data automatically
- To choose how often to automatically collect data samples
- To use a set of logged data to find information
- To use a computer program to sort data by one attribute
- To export information in different formats

