

Year 4 - The internet

Computer Science - Networks

Lesson	Objective
1	I can describe the internet as a network of networks
	I can demonstrate how information is shared across the internet
	I can discuss why a network needs protecting
2	I can describe the different networked devices and how they connect
	I can explain how the internet allows us to view the World Wide Web
	I can recognise that the World Wide Web is the part of the internet that contains websites and web pages
3	I can explain the types of media that can be shared on the World Wide Web (WWW)
	I can describe where websites are stored when uploaded to the WWW
	I can describe how to access websites on the WWW
4	I can create media which can be found on websites
	I can recognise that I can add content to the WWW
	I can explain that new content can be created online
5	I can explain that websites and their content are created by people
	I can suggest who owns the content on websites
	I can explain that there are rules to protect content
6	I can explain that not everything on the World Wide Web is true.
	I can explain why some information I find online may not be honest, accurate, or legal.
	I can explain why I need to think carefully before I share or reshare content

Year 4 - Audio editing

Information Technology and Digital Literacy - Media

Lesson	Objective
1	I can identify digital devices that can record sound and play it back
	I can identify the inputs and outputs required to play audio or record sound
	I can recognise the range of sounds that can be recorded
2	I can use a device to record audio and play back sound
	I can suggest how to improve my recording
	I can discuss what other people include when recording sound for a podcast
3	I can plan and write the content for a podcast
	I can discuss why it is useful to be able to save digital recordings
	I can save a digital recording as a file
4	I can open a digital recording from a file
	I can discuss ways in which audio recordings can be altered
	I can edit sections of of an audio recording
5	I can discuss sounds that other people combine
	I can choose suitable sounds to include in a podcast
	I can use editing tools to arrange sections of audio
6	I can explain that digital recordings need to be exported to share them
	I can discuss the features of a digital recording I like
	I can suggest improvements to a digital recording

Year 4 - Photo editing

Information Technology and Digital Literacy - Media

Lesson	Objective
1	I can identify changes that we can make to an image
	I can explore how images can be changed in real life
	I can explain the effect that editing can have on an image
2	I can explain what has changed in an edited image
	I can change the composition of an image by selecting parts of it
	I can consider why someone might want to change the composition of an image
3	I can talk about changes made to images
	I can choose effects to make my image fit a scenario
	I can explain why my choices fit a scenario
4	I can identify how an image has been retouched
	I can give examples of positive and negative effects that retouching can have on an image
	I can choose appropriate tools to retouch an image
5	I can sort images into 'fake' or 'real' and explain my choices
	I can combine parts of images to create new images
	I can talk about fake images around me
6	I can consider the effect of adding other elements to my work
	I can compare the original image with my completed publication
	I can evaluate the impact of my publication on others through feedback

Year 4 - Data logging

Information Technology - Data and Information

Lesson	Objective
1	I can choose a data set to answer a given question
	I can suggest questions that can be answered using a given data set
	I can identify data that can be gathered over time
2	I can explain that sensors are input devices
	I can use data from a sensor to answer a given question
	I can identify that data from sensors can be recorded
3	I can identify a suitable place to collect data
	I can identify the intervals used to collect data
	I can talk about the data that I have captured
4	I can import a data set
	I can use a computer to view data in different ways
	I can use a computer program to sort data
5	I can propose a question that can be answered using logged data
	I can plan how to collect data using a data logger
	I can use a data logger to collect data
6	I can interpret data that has been collected using a data logger
	I can draw conclusions from the data that I have collected
	I can explain the benefits of using a data logger

Year 4 - Repetition in shapes

Computer Science - Programming

Lesson	Objective
1	I can program a computer by typing commands
	I can explain the effect of changing a value of a command
	I can create a code snippet for a given purpose
2	I can use a template to create a design for my program
	I can write an algorithm to produce a given outcome
	I can test my algorithm in a text-based language
3	I can identify everyday tasks that include repetition as part of a sequence, eg brushing teeth, dance moves
	I can identify patterns in a sequence, eg 'step 3 times' means the same as 'step, step, step'
	I can use a count-controlled loop to produce a given outcome
4	I can identify the effect of changing the number of times a task is repeated
	I can predict the outcome of a program containing a count-controlled loop
	I can choose which values to change in a loop
5	I can identify 'chunks' of actions in the real world
	I can use a procedure in a program
	I can explain that a computer can repeatedly call a procedure
6	I can design a program that includes count-controlled loops
	I can make use of my design to write a program
	I can develop my program by debugging it

Year 4 - Repetition in games

Computer Science - Programming

Lesson	Objective
1	I can list an everyday task as a set of instructions including repetition
	I can predict the outcome of a snippet of code
	I can modify a snippet of code to create a given outcome
2	I can modify loops to produce a given outcome
	I can choose when to use a count-controlled and an infinite loop
	I can recognise that some programming languages enable more than one process to be run at once
3	I can choose which action will be repeated for each object
	I can explain what the outcome of the repeated action should be
	I can evaluate the effectiveness of the repeated sequences used in my program
4	I can identify which parts of a loop can be changed
	I can explain the effect of my changes
	I can re-use existing code snippets on new sprites
5	I can evaluate the use of repetition in a project
	I can select key parts of a given project to use in my own design
	I can develop my own design explaining what my project will do
6	I can refine the algorithm in my design
	I can build a program that follows my design
	I can evaluate the steps I followed when building my project