

# Computing Year Group Objectives

KS1

Year 1	
Control Systems	Understand what algorithms are
	Create simple programmes
Information Technology	Use technology to create content
	Use technology to store digital content
	Use a mouse or trackpad effectively to navigate websites
	Save and reopen work on a digital device
Digital Literacy	Use technology safely
	Log on to a computer
	Keep personal information private
	Recognise common uses of technology beyond school

# Computing Year Group Objectives

Year 2	
Control Systems	Use logical reasoning to predict the behaviour of programmes
	Debug simple programmes
	Understand that algorithms are implemented as programmes on digital devices
	Understand that programmes run by following precise instructions
Information Technology	Use technology to organise digital content
	Use technology to create, communicate and collaborate
	Use ICT to source, generate and amend images.
	Begin to change or enhance photographs and pictures (crop, recolour).
	Create a simple animation using still images
	Take digital photographs and record video
	Use software to explore sound and musical phrases.
	Discuss and explore how to use ICT to organise, present and understand data as a simple graph.
Digital Literacy	Use technology respectfully
	Understand where/how to seek help when they have concerns about content

# Computing Year Group Objectives

KS2

Year 3	
Control Systems	Write programmes that create specific goals
	Use sequence in programmes
	Work with various forms of input and output
Information Technology	Use search technology to communicate effectively
	Use technology to collect information
	Use a database to retrieve information
	Present data in a range of ways to convey information
	Use technology to collaborate on a task
	Edit digital content in response to feedback
Digital Literacy	Use technology responsibly
	Identify a range of ways to share concerns about conduct
	Recognise the benefits and risks of different apps and websites
	Understand the importance of a good password
	Understand the dangers of spending too long online and the importance of regular screen breaks.
	Understand when to share personal information and when not to

# Computing Year Group Objectives

Year 4	
Control Systems	I can experiment with variables to control models
	Design, write and debug programmes that perform specific goals.
	Use sequence, selection and repetition in programs; work with variables.
	I can make accurate predictions about what I think will happen
	Understand computer networks, e.g. the internet
Information Technology	I can select and use software to accomplish given goals
	I can collect and present data in different ways
	Design and create digital content for a specific purpose
	I can evaluate and analyse information
	I can use technology to collaborate in different ways
	Use ICT to compose music or sounds including creating melodies
	Storyboard and shoot a short stop motion animated sequence.
	Use a range of tools to edit and enhance media for particular effect
Digital Literacy	I recognise acceptable and unacceptable behaviour using technology
	Compose emails
	Know how to respond to unpleasant communications via texts, IM, email or chat rooms.
	Understand the opportunities technology offers for communication
	Be discerning in evaluating digital content

# Computing Year Group Objectives

Year 5	
Control Systems	I can combine sequences of instructions to turn an external device on and off
	Use logical reasoning to detect errors in algorithms
	Understand how computer networks work including the internet
	Use selection within programs
Information Technology	Understand how search results are ranked
	Select and combine software on a range of devices
	Generate, amend and combine visual media from different sources for a specific audience or task.
	Create a movie including still images and sound and add suitable titles and transitions.
	Capture/review different images, considering lighting, positioning and angle appropriate to a given task/audience.
	Understand the benefits of technology to collaborate with others
	Use filters in a database to find out specific information
	Recognise an audience when designing and creating digital content
	Identify and use appropriate hardware and software to fulfil a specific task
	Create different types of graphs and charts that are appropriate to the data I am using; I can use them to interpret and answer a specific question.
	I can select and use suitable software and hardware to produce a multimedia soundtrack.
Digital Literacy	Know where to find copyright free images and audio, and why this is important
	Beginning to question information based on author and location; recognise different viewpoints and the impact of incorrect data.

# Computing Year Group Objectives

	Share and exchange ideas using emails/electronic communication respectfully.
	Understand the issues of copyright and the importance of acknowledging sources.
	Understand that everything we do online leaves a digital footprint that can last forever.
	Know what to do and who to contact if we see something that upsets / concerns us online.
	Understand privacy settings and what pictures are appropriate to share online.
	Discuss the benefits and dangers of communicating online/through different forms of technology.
	Know the meaning of common website extensions (.org, .net. Gov etc)
	Understand what makes a strong password and why this is important at school and in the wider world

# Computing Year Group Objectives

Year 6	
Control Systems	I recognise that different solutions can exist for the same problem
	Use logical reasoning to detect errors in algorithms
	Combine a variable with relational operators (< = >) to determine when a program changes, e.g. if score > 5, say “well done”
	Can design a physical computing system that uses sensors, e.g. using a flow chart
	Refine a program based on end user feedback.
	I can explore 'what if' questions by planning different scenarios for controlled devices
Information Technology	Appreciate how search results are ranked
	Select and combine software on a range of devices
	Collaborate with individuals and groups to create digital content for a specific purpose.
	Discuss and explore the use of ICT to sort, organise and classify objects based on their properties.
	Use ICT to create and modify charts quickly and easily.
	Create databases, retrieve information and draw conclusions based on results entered.
	Find suitable images, video and sounds from appropriate sources, taking into account copyright issues.
	Remix and edit a range of media to create content.
	Use appropriate ICT resources to compose music or sounds to accompany a story.
	Choose appropriate hardware to capture and review a range of images, considering lighting, positioning, sound quality and angle.

# Computing Year Group Objectives

Digital Literacy	Critically evaluate websites for reliability of information/ bias and authenticity to include use of social media
	Demonstrate responsible use of online services and technologies, and know a range of ways to report concerns
	Understand the impact of an individual sending or uploading unkind or inappropriate content.
	I can produce formal or informal messages, appropriate to the task
	Understand what 'Plagiarism' means and that it is important to acknowledge sources.
	Understand that not all information on the internet is legal to use or copy
	Understand that we are all digital citizens and the potential impact and influence we can have on the outside world
	Know the meaning of common website extensions (.org, . net. Gov etc) Identify secure servers (padlock such as internet banking).
	Become increasingly savvy online consumers: know that algorithms are used to track online activities with a view to targeting advertising and information