

## **Computing Objectives**

## Cycle A (2024 - 2025)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Computing Systems and Networks Technology around	Creating Media Digital painting	Programming A Moving a robot	Data and Information Grouping Data	Creating Media Digital writing	Programming B Programming animation
Year 1 / 2	us  I can identify technology I can identify a computer and its main parts I can use a mouse in different ways I can use a keyboard to type on a computer I can use the keyboard to edit text create rules for using technology responsibly	<ul> <li>I can describe what different freehand tools do</li> <li>I can use the shape tool and the line tools</li> <li>I can make careful choices when painting a digital picture</li> <li>I can explain why I chose the tools I used</li> <li>I can use a computer on my own to paint a picture</li> <li>I can compare painting a picture on a computer and on paper</li> </ul>	<ul> <li>I can explain what a given command will do</li> <li>I can act out a given word</li> <li>I can combine 'forwards' and 'backwards' commands to make a sequence</li> <li>I can combine four direction commands to make sequences</li> <li>I can plan a simple program</li> <li>I can find more than one solution to a problem</li> </ul>	I can label objects I can identify that objects can be counted I can describe objects in different ways I can count objects with the same properties I can compare groups of objects I can answer questions about groups of objects	I can use a computer to write I can add and remove text on a computer I can identify that the look of text can be changed on a computer I can make careful choices when changing text I can explain why I used the tools that I chose compare typing on a computer to writing on paper	<ul> <li>I can choose a command for a given purpose</li> <li>I can show that a series of commands can be joined together</li> <li>I can identify the effect of changing a value</li> <li>I can explain that each sprite has its own instructions</li> <li>I can design the parts of a project</li> <li>I can use my algorithm to create a program</li> </ul>

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	Computing Systems and Networks Connecting	Creating Media Stop Frame Animation	Programming A Sequencing Sounds	Data and Information Branching databases	Creating Media Desktop Publishing	Programming B Events and actions
Year 3 / 4	Computers  I can explain how digital devices function I can identify input and output devices I can recognise how digital devices can change the way that we work I can explain how a computer network can be used to share information I can explore how digital devices can be connected I can recognise the physical components of a network	<ul> <li>I can explain that animation is a sequence of drawings or photographs</li> <li>I can relate animated movement with a sequence of images</li> <li>I can plan an animation</li> <li>I can identify the need to work consistently and carefully</li> <li>I can review and improve an animation</li> <li>I can evaluate the impact of adding other media to an animation</li> </ul>	<ul> <li>I can explore a new programming environment</li> <li>I can identify that commands have an outcome</li> <li>I can explain that a program has a start</li> <li>I can recognise that a sequence of commands can have an order</li> <li>I can change the appearance of my project</li> <li>I can create a project from a task description</li> </ul>	I can create questions with yes/no answers I can identify the attributes needed to collect data about an object I can create a branching database I can explain why it is helpful for a database to be well structured I can plan the structure of a branching database I can plan the structure of a branching database I can independently create an identification tool	<ul> <li>I can recognise how text and images convey information</li> <li>I can recognise that text and layout can be edited</li> <li>I can choose appropriate page settings</li> <li>I can add content to a desktop publishing publication</li> <li>I can consider how different layouts can suit different purposes</li> <li>I can consider the benefits of desktop publishing</li> </ul>	<ul> <li>I can explain how a sprite moves in an existing project</li> <li>I can create a program to move a sprite in four directions</li> <li>I can adapt a program to a new context</li> <li>I can develop my program by adding features</li> <li>I can identify and fix bugs in a program</li> <li>I can design and create a mazebased challenge</li> </ul>

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	Autumn 1  Computing Systems and Networks Systems and Searching  I can explain that computers can be connected together to form systems I can recognise the role of computer systems in our lives	Autumn 2  Creating Media Video Production  I can explain what makes a video effective I can use a digital device to record video I can capture video using a range of techniques I can create a storyboard	Programming A Selection in physical Computing  I can control a simple circuit connected to a computer  I can write a program that includes count- controlled loops I can explain that a loop can stop	Data and Information Flat File Databases  I can use a form to record information I can compare paper and computer-based databases I can outline how you can answer questions by	Creating Media Introduction to Vector Graphics  I can identify that drawing tools can be used to produce different outcomes I can create a vector drawing by combining shapes I can use tools to	Programming B Selection in quizzes  I can explain how selection is used in computer programs I can relate that a conditional statement connects a condition to an outcome I can explain how
Year 5	<ul> <li>I can identify how to use a search</li> </ul>	I can identify that video can be improved through reshooting and editing I can consider the impact of the choices made when making and sharing a video	when a condition is met	grouping and then sorting data I can explain that tools can be used to select specific data I can explain that computer programs can be used to compare data visually I can use a real- world database to answer questions	achieve a desired effect  I can recognise that vector drawings consist of layers  I can group objects to make them easier to work with  I can apply what I have learned about vector drawings	<ul> <li>I can explain now selection directs the flow of a program</li> <li>I can design a program that uses selection</li> <li>I can create a program that uses selection</li> <li>I can evaluate my program</li> </ul>

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Year 6	Computing Systems and Networks Communication and collaboration  I can explain the importance of internet addresses I can recognise how data is transferred across the internet I can explain how sharing information online can help people to work together I can evaluate different ways of working together online I can recognise how we communicate using technology I can evaluate different methods of online communication	Creating Media Web page creation  I can review an existing website and consider its structure  I can plan the features of a web page  I can consider the ownership and use of images (copyright)  I can recognise the need to preview pages  I can outline the need for a navigation path  I can recognise the implications of linking to content owned by other people	Programming A Variables in games  I can define a 'variable' as something that is changeable I can explain why a variable is used in a program I can choose how to improve a game by using variables I can design a project that builds on a given example I can use my design to create a project I can evaluate my project	Data and Information Spreadsheets  I can create a data set in a spreadsheet I can build a data set in a spreadsheet I can explain that formulas can be used to produce calculated data I can apply formulas to data I can create a spreadsheet to plan an event I can choose suitable ways to present data	Creating Media 3d modelling  I can recognise that you can work in three dimensions on a computer  I can identify that digital 3D objects can be modified  I can recognise that objects can be combined in a 3D model  I can create a 3D model for a given purpose  I can plan my own 3D model  I can create my own digital 3D model	Programming B Sensing movement  I can create a program to run on a controllable device I can explain that selection can control the flow of a program I can update a variable with a user input I can use an conditional statement to compare a variable to a value I can design a project that uses inputs and outputs on a controllable device I can develop a program to use inputs and outputs on a controllable device