

Study Guide for Computing – 2024/2025

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Online safety (Y1-6)
EYFS	People who help us	Winter warmers	Boats ahoy	Spring time	Super space	Summer fun
Year 1	Technology around us	Moving a robot	Grouping data	Digital writing	Programming animations	-Self-image & identity -Online relationships -Online reputation -Copyright and ownership
Year 2	Information technology around us	Digital photography	Robot algorithms	Pictograms	Programming quizzes	-Online bullying -Health, wellbeing and lifestyle -Managing online information -Privacy and security
Year 3	Connecting computers	Sequencing sounds	Branching databases	Desktop publishing	Events and actions in programs	-Self-image & identity -Online relationships -Online bullying -Privacy and security
Year 4	The internet	Audio production	Repetition in shapes	Photo editing	Repetition in games	-Online reputation -Managing online information -Health, wellbeing and lifestyle -Copyright and ownership
Year 5	Systems and searching	Video production	Flat-file databases	Introduction to vector graphics	Selection in quizzes	-Online bullying -Online relationships -Self-image & identity -Privacy and security

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Year 6	Communication and collaboration	Webpage creation	Variables in games	Introduction to spreadsheets	Sensing movement	<ul style="list-style-type: none"> -Online reputation -Health, wellbeing and lifestyle -Copyright and ownership - Managing online information
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Year 1	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Online safety
Unit name	Technology around us	Moving a robot	Grouping data	Digital writing	Programming animations	Autumn 1: Self-image & identity Combine both sessions into one lesson
Main software/hardware	www.paintz.app	Bee-bot	Microsoft PowerPoint	Microsoft Word	ScratchJr	Autumn 2: Online relationships Combine first 2 sessions into one lesson
Lesson 1	Identifying technology	Explaining what a given command will do	Labelling objects	Using a computer to write	Choosing a command for a given purpose	Spring 1: Online relationships Combine second 2 sessions into one lesson
Lesson 2	Identifying a computer and its main parts	Acting out a given word	Identifying that objects can be counted	Adding and removing text on a computer	Showing that a series of commands can be joined together	Spring 2: Online reputation Combine both sessions into one lesson
Lesson 3	Using a mouse in different ways	Combining forwards and backwards commands to make a sequence	Describing objects in different ways	Identifying that the look of text can be changed on a computer	Identifying the effect of changing value	

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Lesson 4	Using a keyboard to type on a computer	Combining four direction commands to make sequences	Counting objects with the same properties	Making careful choices when changing text	Explaining that each sprite has its own instructions	Summer 1: Copyright and ownership Combine first 2 sessions into one lesson Summer 2: Copyright and ownership Combine second 2 sessions into one lesson
Lesson 5	Using a keyboard to edit text	Planning a simple program	Comparing groups of objects	Explaining why I used the tools that I chose	Designing the parts of a project	
Lesson 6	Creating rules for using technology responsibly	Finding more than one solution to a problem	Answering questions about groups of objects	Comparing typing on a computer to writing on paper	Using my algorithm to create a program	
Year 2	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Online safety
Unit name	Information technology around us	Digital photography	Robot algorithms	Pictograms	Programming quizzes	Autumn 1: Online bullying Combine all sessions into one lesson
Main software/hardware	Microsoft PowerPoint	Digital camera/iPad camera	Bee-bot	j2data Pictogram	ScrathJr	Autumn 2 Health, wellbeing and lifestyle
Lesson 1	Recognising the uses and features of information technology	Using a digital device to take a photograph	Describing a series of instructions as a sequence	Recognising that we can count and compare objects using tally charts	Explaining that a sequence of commands has a start	Spring 1 & 2: Managing online information Combine all sessions into two lessons

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Lesson 2	Identifying the uses of information technology in the school	Making choices when taking a photograph	Explaining what happens when we change the order of instructions	Recognising that objects can be represented as pictures	Explain that a sequence of commands has an outcome	Summer 1: Privacy and security Combine first 2 sessions into one lesson Summer 2: Privacy and security Combine second 2 sessions into one lesson
Lesson 3	Identifying information technology beyond school	Describing what makes a good photograph	Using logical reasoning to predict the outcome of a program	Creating a pictogram	Creating a program using a given design	
Lesson 4	Explaining how information technology helps us	Deciding how photographs can be improved	Explaining that programming projects can have code and artwork	Selecting objects by attribute and making comparisons	Changing a given design	
Lesson 5	Explaining how to use information technology safely	Using tools to change an image	Designing an algorithm	Recognising that people can be described by attributes	Creating a program using my own design	
Lesson 6	Recognising that choices are made when using information technology	Recognising that photos can be changed	Creating and debugging a program	Explaining that we can present information using a computer	Deciding how my project can be improved	
Year 3	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	
Unit name	Connecting computers	Sequencing sounds	Branching databases	Desktop publishing	Events and actions in programs	Autumn 1: Self-image & identity

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Main software/hardware	Painting program (any)	Scratch	j2data Branch and Pictogram	Canva (could use publisher as an alternative)	Scratch	Combine all sessions into one lesson
Lesson 1	Explaining how digital devices function	Exploring a new programming environment	Creating questions with yes/no answers	Recognising how text and images convey information	Explaining how a sprite moves in an existing project	Autumn 2: Online relationships Combine first two sessions into one lesson
Lesson 2	Identifying input and output devices	Identifying that commands have an outcome	Identifying the attributes needed to collect data about an object	Recognising that text and layout can be edited	Creating a program to move a sprite in four directions	Spring 1: Online relationships Combine second two sessions into one lesson
Lesson 3	Recognising how digital devices can change the way we work	Explaining that a program has a start	Creating a branching database	Choosing appropriate page settings	Adapting a program to a new context	Spring 2: Online relationships Combine third two sessions into one lesson
Lesson 4	Explaining how a computer network can be used to share information	Recognising that a sequence of commands can have an order	Explaining why it is helpful for a database to be well structured	Adding content to a desktop publishing publication	Developing my program by adding features	Summer 1: Online bullying Combine both sessions into one lesson
Lesson 5	Exploring how digital devices can be connected	Changing the appearance of my project	Planning the structure of a branching database	Considering how different layouts can suit different purposes	Identifying and fixing bugs in a program	Summer 2: Privacy and security
Lesson 6	Recognising the physical components of a network	Creating a project from a task description	Creating an identification tool independently	Considering how different layouts can suit different purposes	Designing and creating a maze-based challenge	

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						Combine all sessions into one lesson
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Year 4	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Online safety
Unit name	The internet	Audio production	Repetition in shapes	Photo editing	Repetition in games	Autumn 1: Online reputation Combine both sessions into one lesson
Main software/hardware	Various websites	Audacity	FMS Logo	Paint.NET	Scratch	
Lesson 1	Describing how networks physically connect to other networks	Identifying that sound can be recorded	Identifying that accuracy in programming is important	Explaining that the composition of digital images can be changed	Developing the use of count-controlled loops	Autumn 2: Managing online information Combine first two sessions into one lesson
Lesson 2	Recognising how networked devices make up the internet	Explaining that audio recordings can be edited	Creating a program in a text-based language	Explaining that colours can be changed in digital images	Explaining that in programming there are infinite loops and count controlled loops	Spring 1: Managing online information Combine second two sessions into one lesson
Lesson 3	Outlining how websites can be shared via the World Wide Web	Recognising the different parts of creating a podcast project	Explaining what 'repeat' means	Explaining how cloning can be used in photo editing	Developing a design that includes two or more loops which run at the same time	Spring 2: Managing online information

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Lesson 4	Describing how content can be added and accessed on the World Wide Web	Applying audio editing skills independently	Modifying a count-controlled loop to produce a given outcome	Explaining that images can be combined	Modifying an infinite loop in a given program	Combine third two sessions into one lesson Summer 1: Health, wellbeing and lifestyle Combine both sessions into one lesson
Lesson 5	Recognising how the content of the World Wide Web is created by people	Combining audio to enhance my podcast project	Decomposing a task into small steps	Combining images for a purpose	Designing a project that includes repetition	Summer 2: Copyright and ownership Combine both sessions into one lesson
Lesson 6	Evaluating the consequences of unreliable content	Evaluating the effective use of audio	Creating a program that uses count-controlled loops to produce a given outcome	Evaluating how changes can improve an image	Creating a project that includes repetition	
Year 5	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Online safety
Unit name	Systems and searching	Video production	Flat-file databases	Introduction to vector graphics	Selection in quizzes	Autumn 1 & 2: Online bullying Combine all sessions into two lessons
Main software/hardware	Google slides (or PowerPoint)	Microsoft Photos	j2data Database	Google drawings (could use Word as an alternative)	Scratch	Spring 1 & 2: Online relationships Combine all sessions into two lessons
Lesson 1	Explaining that computers can be connected together to form systems	Explaining what makes a video effective	Using a form to record information	Identifying that drawing tools can be used to produce different outcomes	Explaining how selection is used in computer programs	Summer 1:

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Lesson 2	Recognising the role of computer systems in our lives	Identifying digital devices that can record a video	Comparing paper and computer-based databases	Creating a vector drawing by combining shapes	Relating that a conditional statement connects condition to an outcome	Self-image & identity Combine both sessions into one lesson
Lesson 3	Experimenting with search engines	Capturing video using a range of techniques	Outlining how you can answer questions by grouping and then sorting data	Using tools to achieve a desired effect	Explaining how selection directs the flow of a program	Sumer 2: Privacy and security Combine both sessions into one lesson
Lesson 4	Describing how search engines select results	Creating a storyboard	Explaining that tools	Recognising that vector drawings consist of layers	Designing a program which uses selection	
Lesson 5	Explaining how results are ranked	Identifying that video can be improved through reshooting and editing	Explaining that computer programs can be used to compare data visually	Grouping objects to make them easier to work with	Creating a program which uses selection	
Lesson 6	Recognising why the order of results is important, and to whom	Considering the impact of the choices made when making and sharing a video	Using a real-world database to answer questions	Applying what I have learned about vector drawings	Evaluating my program	
Year 6	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	
Unit name	Communication and collaboration	Webpage creation	Variables in games	Introduction to spreadsheets	Sensing movement	Autumn 1: Online reputation

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						Combine both sessions into one lesson
Main software/hardware	Google slides (or PowerPoint)	Google sites	Scratch	Microsoft Excel	Microsoft MakeMode and micro:bit	Autumn 2: Health, wellbeing and lifestyle Combine first two sessions into one lesson
Lesson 1	Explaining the importance of internet access	Reviewing an existing website and consider its structure	Defining a 'variable' as something that is changeable	Creating a data set in a spreadsheet	Creating a program to run on a controllable device	Spring 1: Health, wellbeing and lifestyle Combine second two sessions into one lesson
Lesson 2	Recognising how data is transferred across the internet	Planning the features of a web page	Explaining why a variable is used in a program	Building a data set in a spreadsheet	Explaining that selection can control the flow of a program	Spring 2: Copyright and ownership Combine both sessions into one lesson
Lesson 3	Explaining how sharing information online can help people to work together	Considering the ownership and use of images (copyright)	Choosing how to improve a game by using variables	Explaining that formulas can be used to produce calculated data	Updating a variable with user input	Summer 1 & 2: Managing online information There are 11 sessions to choose from. Up to 6 to combine into two lessons.
Lesson 4	Evaluating different ways of working together online	Recognising the need to preview pages	Designing a project that builds on a given example	Applying formulas to data	Using a conditional statement to compare a variable to a value	
Lesson 5	Recognising how we communicate using technology	Outlining the need for a navigation path	Using my design to create a project	Creating a spreadsheet to plan an event	Designing a project that uses inputs and outputs on a controllable device	
Lesson 6	Evaluating different methods of online communication	Recognising the implications of linking to content owned by other people	Evaluating my project	Choosing suitable ways to present data	Developing a program to use inputs and outputs on a controllable device	