



Swinderby All Saints Church of England (Controlled) Primary School



Computing Progression Mixed classes Oak Academy 2026-2028

EYFS Objectives	Development matters	Show resilience and perseverance in the face of challenge	Know and talk about different factors that support their overall health and wellbeing (sensible amounts of screen time)	Develop their small motor skills so that they can use a range of tools competently, safely and confidently	Explore, use and refine a variety of artistic effects to express their ideas and feelings
	Early Learning Goals	Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.	Explain the reasons for rules, know right from wrong and try to behave accordingly.	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	

Key Stage 1 National Curriculum Objectives	1.1	1.2	1.3	1.4	1.5	1.6
	understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	create and debug simple programs	use logical reasoning to predict the behaviour of simple programs	use technology purposefully to create, organise, store, manipulate and retrieve digital content	recognise common uses of information technology beyond school	use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key Stage 2 National Curriculum Objectives	2.1	2.2	2.3	2.4	2.5	2.6	2.7
	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	use sequence, selection, and repetition in programs; work with variables and various forms of input and output	use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

EYFS (Barefoot)

EYFS	Barefoot computing – Awesome Autumn 1. Garlands Galore 2. Leaf Labyrinth 3. Pumpkin Soup	Barefoot computing – Busy bodies 1. Parts of our body 2. Make a body 3. Look how we grow 4. Movement algorithms	Barefoot computing – Winter warmers 1. Feed the birds 2. Let's make an igloo 3. Scarves for snowmen	Barefoot computing – Boats Ahoy 1. What is a boat? 2. Is this a good boat? 3. On board role play 4. Build a boat	Barefoot computing – Summer fun 1. Colour collection 2. Journeys 3. Seaside Tangrams	Exploring technology 1. Turning device on and off. 2. Taking a photo. 3. Find and delete unwanted photos
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EYFS- [Early Years | EN | Barefoot Computing](#)

KS1 and KS2: <https://www.thenational.academy/teachers/programmes/computing-primary/units>

Class 1 Year 1 and 2 Cycle A

	Unit	Lesson breakdown	1.1	1.2	1.3	1.4	1.5	1.6	Links to NC/ wider world
Autumn	Year 1 Unit Digital Painting	1. Painting using computers 2. Using lines and shapes to create digital pictures 3. Creating digital pictures in the style of an artist 4. Choosing the right digital painting tool 5. Using the paintbrush tool to create digital pictures 6. Comparing computer art and painting							Copyright and ownership Art and Design
	Why this? Why now?	This unit introduces pupils to using digital tools for the first time. It builds their confidence and foundational skills in operating digital devices. Before starting, pupils should already know how to turn on and log in to their device. Throughout the unit, they will develop key digital skills they'll use across the curriculum. In later units these same skills will support pupils as they explore different ways to create and edit digital images and apply these same skills across a range of applications.							
	Year 2 Unit Digital Writing	1. Exploring the keyboard 2. Adding and removing text 3. Make changes to text 4. Exploring the toolbar 5. Choosing formatting tools 6. Comparing digital writing to using a pencil							Art and design English - Writing
Spring	Why this? Why now?	This unit develops pupils' skills in creating and editing digital content with a word processor. They will improve typing accuracy, learn to navigate keys efficiently and refine design choices for clarity and impact. Alongside the previous unit, this builds essential computer skills that help pupils access, record, and present their learning effectively by using technology as a tool to support what they do.							
	Year 1 Unit Creating animations in programs	1. Programming using command blocks 2. Joining command blocks 3. Changing values in a program 4. Controlling sprites 5. Designing an animated program 6. Testing a program							Privacy and security Copyright and ownership
Summer	Why this? Why now?	This unit introduces pupils to how computer programs are built and carry out actions. Using block-based programming they explore controlling sprites, selecting backgrounds and creating or adapting projects, alongside designing simple algorithms. This is the first step in developing computational thinking, giving pupils the foundations in logic, sequencing, and problem solving that will be revisited and expanded upon.							

Class 1 Year 1 and 2 Cycle B

Autumn	Unit	Lesson breakdown	1.1	1.2	1.3	1.4	1.5	1.6	Links to NC/ wider world
	Year 2 Unit Information technology in the world beyond school	1. Introduction to IT 2. IT in schools 3. IT in the world 4. Benefits of IT 5. Using IT safely 6. Making choices when using IT							Health, wellbeing and lifestyle Privacy and security
	Why this? Why now?	This unit progresses pupils' knowledge and understanding of technology and how they interact with it both in school and the wider world. They will build their knowledge of what Information Technology is and how it is used day-to-day. They will also consider the appropriate use of IT, setting the expectation that it should be used carefully and responsibly throughout their lives.							
Spring	Year 2 Unit Using IT to organise and present data	1. Counting and comparing data 2. Entering data 3. Creating pictograms 4. Attributes in data 5. Comparing data 6. Presenting information clearly							Maths Science/UTW
	Why this? Why now?	Having previously explored how to collect, summarise and present data, pupils now develop their skills in organising and classifying information. They refine their ability to identify attributes, ask precise yes/no questions and sort objects, strengthening logical thinking and decision-making. This progression builds the foundation for analysing, comparing and structuring data preparing pupils for more complex tasks involving patterns, problem-solving, and drawing conclusions.							
Summer	Year 2 Unit Building sequences in programs	1. Programming sequences 2. Outcomes of sequences 3. Building blocks to create a sequence 4. Programming multiple sprites and backgrounds 5. Designing and creating a quiz program 6. Evaluating and improving a program							Design and technology
	Why this? Why now?	This unit builds on pupils' previous experiences with block-based programming to deepen their understanding of how sequences of commands produce outcomes. They learn to predict and explain code behaviour, recognising how small changes affect results. By designing and modifying quiz questions, pupils take an early step in structured problem-solving, laying the groundwork for more complex programming concepts and applications in later years.							

Class 2 Year 3 and 4 Cycle A

	Unit	Lesson breakdown	2.1	2.2	2.3	2.4	2.5	2.6	2.7	Links to NC/ wider world
Autumn	Year 3 Unit Computer Networks	- Digital devices - Designing a digital device - Digital devices for different activities - Connecting digital devices - Transferring information between devices - Physical components of a computer network								
	Year 3 Unit Stop-frame animation Imotion on iPads	- Introduction to animation - Creating animations using frames - Using storyboards to plan an animation - Consistency in frames - Reviewing an animation - Adding media to an animation								English Copyright and ownership
Spring	Year 3 Unit Programming sequence using sound https://oak.link/scratch	- Programming in a block-based environment - Programming sprites - Sequences - Ordering commands - Combining code blocks in a sequence - Creating a project using a block-based environment								Music Copyright and ownership
	Year 3 Unit Organising data and using databases https://oak.link/branching-db	- Yes or no questions - Making groups - Creating a branching database - Structuring a branching database - Planning a branching database - Making a dinosaur identifier								Privacy and security Maths
Summer	Year 3 Unit Desktop Publishing https://oak.link/google-slides https://oak.link/canva	- Using text and images to communicate - Editing text - Placeholders in templates - Adding content - Applying layout in desktop publishing - Editing and improving a document								Copyright and ownership Managing online information
	Year 3 Unit Events and actions in programming https://oak.link/scratch	- Moving a sprite - Program a sprite to move around a maze - Using the pen tool in a program - Adding features to a program - Debugging movement - Creating a maze project								Copyright and ownership Design and technology

Class 2 Year 3 and Year 4 Cycle B

	Unit	Lesson breakdown	2.1	2.2	2.3	2.4	2.5	2.6	2.7	Links to NC/ wider world
Autumn	Year 4 Unit The Internet	1. Connecting networks 2. The internet and world wide web 3. Sharing information 4. Content on the world wide web 5. Ownership and the world wide web 6. Reliability of content on the world wide web								Copyright and ownership Managing online information
	Year 4 Unit Audio Production https://oak.link/audacity Link to topic?	1. Recording sounds 2. Editing audio 3. Planning a podcast 4. Creating a podcast 5. Combining audio 6. Evaluating podcasts								Copyright and ownership History/Geography
Spring	Year 4 Unit Repetition in Programs https://oak.link/fms-logo	1. Programming a screen turtle 2. Create an algorithm for a text-based program 3. Patterns and repeats 4. Count-controlled loops 5. Procedures in programming 6. Creating a program that uses loops								Maths
	Year 4 Unit Data logging Microbits? https://oak.link/makecode	1. Using a data set to answer a question 2. Using a digital device to collect data 3. Using data loggers to collect data 4. Analysing data using a computer 5. Data for answers 6. Using data from sensors to answer questions								Science
Summer	Year 4 Unit Photo editing https://oak.link/paint-net	1. Changing digital images 2. Recolouring digital images 3. Cloning digital images 4. Combining images 5. Creating digital images for a purpose 6. Evaluating digital images								Copyright and ownership Self-image and identify
	Year 4 Unit Using repetition in programming to create a game https://oak.link/scratch	1. Using loops in a program 2. Types of loops 3. Animating text 4. Modifying a game 5. Designing a game 6. Creating games								Copyright and ownership Design and Technology

Class 3 Year 5 and Year 6 Cycle A

	Unit	Lesson breakdown	2.1	2.2	2.3	2.4	2.5	2.6	2.7	Links to NC/ wider world
Autumn	Year 5 Unit Introduction to computer systems	1. Digital systems 2. Computer systems in society 3. Searching the web 4. Selecting search results 5. How search results are ranked 6. How search results can be influenced								Managing online information
	Year 5 Unit Video Production https://oak.link/openshot	1. What is a video? 2. Filming techniques 3. Using a storyboard 4. Planning a video and script writing 5. Importing and editing videos 6. Video editing and evaluation								English
Spring	Year 5 Unit Exploring selection in physical computing Microbits? https://oak.link/makecode	1. Connecting physical computing devices 2. Combining outputs 3. Controlling with conditions 4. Using a selection to control the flow of a program 5. Design physical projects that include selection 6. Writing and testing algorithms								
	Year 5 Unit Flat-file databases https://oak.link/database	1. Creating a paper-based database 2. Computer databases 3. Using a database 4. Using search tools 5. Comparing data visually 6. Databases in real life								Science Maths
Summer	Year 5 Unit Introduction to vector graphics https://oak.link/google-drawings	1. Shape and line tools 2. Creating images using vector graphics 3. Making effective drawings 4. Layers and objects 5. Manipulating objects 6. Create a vector drawing								Maths Art and Design
	Year 5 Unit Using a selection in programming to develop a quiz https://oak.link/scratch	1. Conditions in selection statements 2. Outcomes from selection statements 3. Using conditions to build quiz questions 4. Designing a quiz 5. Testing a quiz 6. Evaluating a quiz								Topic Managing online information

Class 3 Year 5 and Year 6 Cycle B

	Unit	Lesson breakdown	2.1	2.2	2.3	2.4	2.5	2.6	2.7	Links to NC/ wider world
Autumn	Year 6 Unit Communication and the internet Shared google doc or one drive doc	1. Internet addresses 2. Data pockets 3. Working together 4. Shared working 5. How we communicate 6. Communicating responsibly								Copyright and ownership Self-image and identify
	Year 6 Unit Web page creation https://oak.link/google-sites	1. Features of a good website 2. Webpage layout 3. Copyright of images 4. Device compatibility 5. Follow the breadcrumbs 6. Think before you link								Copyright and ownership
Spring	Year 6 Unit Using variables in programming to develop a game https://oak.link/scratch	1. Introducing variables 2. Updating and changing values in a variable 3. Improving a game 4. Design a game that uses variables 5. Design to code 6. Improving and sharing								Design and Technology
	Year 6 Unit Introduction to spreadsheets https://oak.link/google-sheets	1. Collecting Data 2. Formatting a spreadsheet 3. Spreadsheet formulas 4. Using formulas in a spreadsheet 5. Event planning using a spreadsheet 6. Presenting data using charts								Maths Science
Summer	Year 6 Unit 3D Modelling https://oak.link/tinkercad	1. Introduction to 3D modelling 2. Modifying 3D objects 3. Make your own name badge 4. Making a desk tidy 5. Planning a 3D model 6. Make your own 3D model								Design and Technology Maths
	Year 6 Unit Sensing movement with physical computing https://oak.link/makecode	1. The micro:bit 2. Selection to control the flow in a program 3. Sensing inputs 4. Conditional statements 5. Designing a step counter 6. Making a step counter								Design and Technology Science