

Computing curriculum progression map

Our computing key concepts are:

- Animation and digital art
- Programming
- Word processing skills
- Researching, Creating, and Communicating Information
- Creating and Editing Digital Text
- Data handling skills

The computing curriculum has been designed in line with the National Curriculum for Computing (2013) and is tailored to meet the needs of our pupils. It focuses on developing key strands of **digital literacy, information technology and computer science**, ensuring pupils become confident, safe and purposeful users of technology.

Key concepts are revisited throughout the year to support pupils in building confidence and deepening their understanding over time. The curriculum follows a **cyclical approach**, allowing pupils to revisit and rehearse skills such as creating digital content, handling data, and using programming tools in different contexts. This repeated exposure helps to embed learning and supports progression.

The programme emphasises **practical, real-world application**, enabling pupils to use technology to communicate ideas, organise information, and solve problems. It also prioritises **online safety and responsible use of technology**, ensuring pupils can engage with digital tools safely and appropriately.

We ensure our pre-scheme skills focus on developing pupils' **early independence, confidence, and foundational digital literacy**, enabling them to explore technology safely, communicate meaningfully, understand digital identity, and use devices, tools, and media in simple, purposeful ways before beginning the higher schemes of work.

Pre Scheme A Computing and Online Safety	Vocabulary
•Explore how things work. •Develop their fine motor skills so that they can use a range of tools competently, safely and confidently. •Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. •Notices that an action can cause an outcome through exploratory play with toys •Understands that devices make sounds, show pictures, or play videos. •Identifies themselves in a photo, video or selfie. Digital searching - Recognises different devices (tablet, phone, laptop, computer). - Notices that different apps or icons give different types of information. - Understand that pressing "enter" or "search" shows new information. - Notices that different words bring up different results (with adult modelling). - Understands that a device can answer simple questions (e.g., asking the weather). - Recognises when a device is connected to the internet (e.g., Wi-Fi symbol). Digital communication - Recognises that a message, emoji, or voice note is a way of communicating. - Understands that pressing buttons can send or share things. Understands that someone reads or hears the message they send. Can write or type a short, meaningful word/ phrase (e.g., "hi", "me", "yes"). Understands that words communicate meaning, whether typed or handwritten. Chooses an emoji or symbol to express meaning or feelings. Knows that messages go to <i>someone</i>, not just the device. Can follow a simple sequence of steps (e.g., "open → write → send"). Digital Identity and Ownership - Remember rules without needing an adult to remind them (e.g., turn off the device when finished). - Recognises their name on a login screen, file name, or label. - Understands that their name can be typed or selected from a list. - Identifies their name among other names on a device. - Understands "mine", "yours", and "shared" using visual cues on devices. - Recognises that tapping "duplicate", "copy", or "save as" creates another version of something. - Recognises that photos or drawings they make on a device belong to them.	Computer Laptop On Off Permission Appropriate Not appropriate Camera Photo Connect Video call Shift Keyboard Backwards Forwards Instruction Buttons Collect Command Count Keys Monitor Mouse Move Phone Remote Choices Create Internet Information Safe Share Technology Website App

Undo
Enter
Search
Duplicate

Using Keyboard

- Recognises that tapping a search bar opens a keyboard.
- Understands that typing letters makes letters, numbers and words appear on a screen.
- Be able to hold Shift to type symbols such as !, @, ?
- I can find and start a favourite app on a digital device and select letters on a keyboard.
- Shows resilience and perseverance in the face of a challenge when using technology.

Digital creativity

- Explore, use and refine artistic effects using digital drawing/mark-making tools.
- Choose a colour, brush, or stamp when an adult presents a simple selection.
- Make marks on a screen using my finger or a stylus.
- Clear the page or start a new picture with support.
- Undo a mistake using a simple undo button with adult prompts.
- Select a sticker, shape, or emoji and place it in my picture.
- Match their developing physical skills to tasks and activities (fine motor control, gestures, hand-eye coordination).

Video calling

- Understands that devices can connect to other people (e.g., video call).
- Responds to simple greetings on a device (e.g., waving on a video call).
- Understands turn-taking in communication (e.g., waiting for their turn to speak on a call).
- Understands that the person on the screen is real, not a video.

Online safety

- Understands that they need permission to take photos or videos of others.
- Responds to adults asking for permission to take their photo.
- Know and talk about the different factors that support their overall health and wellbeing: sensible amounts of 'screen time'.
- I know who my safe adults are.

Computing Term 1				
	Scheme A	Scheme B	Scheme C	Scheme D
Topic	Digital Art	Animation (stop-frame paper)	Animation (drawn)	Tools for drawing/Animation (vectors)
Composite Skill	To be able to create a piece of digital art.	To be able to create a stop frame animation	To be able to create a drawn animation	To explore how images are made from shapes and lines
Component skills	-To describe what different tools do -To use the shape tool and the line tools -To make careful choices when painting a digital picture -To explain why I chose the tools I used -To compare painting a picture on a computer and on paper	- To explain that animation is a sequence of drawings or photographs -To relate animated movement with a sequence of images -To plan an animation -To identify the need to work consistently and carefully -To review and improve an animation -To be able to add other media to my animation.	-To understand what an animation is. -To create a scene for an animation. -To understand that animations can be created using digital tools. -To create an animated scene. -To storyboard and create a short animation	-To understand that digital tools can be used to create images. -To understand that vector images are made up of shapes and lines. -To use digital tools to improve detail in images. -To understand that vector images are constructed of layers.
Accreditations / end points in Year 11 only	Entry 82624 Basic computer art skills Alignment table-  82624 Basic computer art sk...	Entry: 120263 STOP MOTION ANIMATION Alignment table-  120263 Stop motion animation	Entry 114487 Creating A Simple Animation Sequence Using Drawing Tools Alignment table-  114487 Simple animation	Level one- 120720 Digital art: Exploring techniques Alignment table-  120720 Digital art: exploring...

Computing Term 2				
	Scheme A	Scheme B	Scheme C	Scheme D
Topic	Programming	Programming	Programming	Programming
Composite Skill Component skills	To be able to programme a physical and virtual toy. -To learn what an algorithm is. -To be able to give instructions. -To be able to plan a simple algorithm (physical) -To be able to plan a simple algorithm (virtually) -To be able to produce a clear set of instructions.	To create a simple game - To choose a command for a given purpose. - To show that a series of commands can be joined together. - To identify the effect of a changing value. - To explain that each Sprite has its own instructions. - To design the parts of a project. - To use my algorithm to create a program.	To be able to sequence a musical instrument -To explore a new programming environment -To identify that commands have an outcome -To explain that a program has a start -To recognise that a sequence of commands can have an order -To change the appearance of my project -To create a project from a task description	To be able to create a sequence of patterns -To identify that accuracy in programming is important -To create a program in a text-based language -To explain what 'repeat' means -To modify a count-controlled loop to produce a given outcome -To decompose a task into small steps -To create a program that uses count-controlled loops to produce a given outcome
Accreditations / end points in Year 11 only	Entry: 87249 Using scratch (unit 1) Alignment table-  87249 Using scratch (unit 1)	Entry: 118666 INTRODUCTION TO SCRATCH Alignment table-  118666 Introduction to scratch	Entry: 115093 SCRATCH: MAKING MUSIC Alignment table-  115093 Scratch: Making music	Level One: 122052 Introduction to control structures: Loops and conditionals Alignment table-  122052 Introduction to control s...

Computing Term 3				
	Scheme A	Scheme B	Scheme C	Scheme D
Topic	Basic Word Processing and Computer Use	Word Processing and Text Organisation	Digital Document Creation and Presentation	Creating Purposeful and Well-Formatted Digital Documents
Composite Skill Component skills	To use a computer to create and edit simple text documents independently. - To identify the basic parts of a computer or laptop. - To use a Touchpad or mouse to control the pointer and click/select. - To understand what a word processor is and how to open it. - To know how to highlight and select text. - To highlight and copy short pieces of text. - To type simple words or sentences into a template.	To use a word processor confidently to create, format, and organise digital text - To understand what each part of a computer does (input/output). - To type letters and numbers accurately. - To type short sentences and save them in a file. - To change font size and colour. - To paste copied text into another location. - To organise and structure information on a page.	To independently create and format a digital document that combines text and images for effective communication - To log in and out of a laptop independently and load a program. - To use a keyboard and keypad to type a short piece of writing. - To select and edit text to improve presentation. - To use bold, italic, and underline for emphasis. - To copy and paste pictures from a search safely. - To create a typed document that includes text and pictures.	To safely and efficiently create a well-formatted digital document for a specific purpose or audience. - To understand basic computer safety and care (e.g. wires, drinks, passwords). - To use simple keyboard shortcuts to work efficiently. - To apply formatting to improve the presentation of written work. - To format a full paragraph with appropriate layout and spacing. - To use copy and paste effectively within a project. - To create a poster, leaflet, or information sheet for a specific purpose.
Accreditations / end points in Year 11 only	Entry: 121765 ICT Skills: Word Processing Alignment table-  121765 Ict skills: Word processing Pre entry: 117420 Basic ict skills Alignment table-  117420 Basic ICT skills	Entry: 105381 Word processing in Microsoft Word Alignment table-  105381 Word processing in micro...	Entry: 121765 ICT Skills: Word Processing Alignment table-  121765 Ict skills: Word processing	Entry: 117387 Using ICT to produce a leaflet or poster Alignment table-  117387 Using ICT to produce a p...

Computing Term 4				
	Scheme A	Scheme B	Scheme C	Scheme D
Topic	Content Creation and Communication	Research, Organisation, and Presentation	Planning, Creating, and Presenting Digital Projects	Research, Communication, and Data Presentation
Composite Skill	To create and share digital content using appropriate tools for communication, organisation, and presentation	To use digital tools to research, organise, and present information in a short project	To plan, create, and present a well-structured digital project using a range of tools for communication, research, and data presentation.	To research, organise, and present information using digital tools for communication and data presentation
Component skills	- To use email to send and receive simple messages with support. - To organise information into a simple list using a spreadsheet or table. - To create a short presentation to share information or ideas. - To find and select suitable pictures using a search tool safely. - To create a digital document combining text and images. - To share their digital work with others in an appropriate way.	- To write and send a basic email. - To enter data into a spreadsheet. - To create a presentation slide with a title and text. - To search for pictures and information using a search engine. - To make three presentation slides for a small project	- To write, send and reply to emails using appropriate language and layout. - To enter, edit and format data in a spreadsheet to present information clearly. - To create a presentation with multiple slides including text, images and transitions. - To use search engines effectively to find reliable and relevant information or images. - To plan, create and present a digital project combining text, images and data from different sources.	- To attach files and reply to a previous email message. - To present data in a chart. - Create short presentation in PowerPoint - Research activities or interests using a search engine. - Create a research project document.
Accreditation s/ end points in Year 11 only	Entry: 86485 Basic Keyboard skills Alignment table-  86485 Basic keyboarding skills	Entry: 117011 Digital skills for everyday life Alignment table-  117011 Digital skills for every...	Level one: 71672 Presentation skills Alignment table-  71672 Presentation skills	Entry: 117011 Digital skills for everyday life Alignment table-  117011 Digital skills for eve... Level one: 86482 Using a spreadsheet package Alignment table-  86482 Using a spreadsheet ...

Computing Term 5				
	Scheme A	Scheme B	Scheme C	Scheme D
Topic	Creating and Editing Digital Text	Programming: Animation and Interaction	Programming	Programming
Composite Skill	To create and manipulate text.	To be able to create an animated quiz.	To be able to use events and actions in programs	To be able to create a program to help people become active
Component skills	-To use a computer to write -To add and remove text on a computer -To identify that the look of text can be changed on a computer -To make careful choices when changing text -To explain why I used the tools that I chose -To compare typing on a computer to writing on paper	-To combine physical Scratch Jr blocks to direct each other to move to obstacles in the story. -To combine motion blocks to make a sprite move. -To program a sprite to move to objects on screen in a specific sequence -To understand that one sprite can be programmed to trigger action for another -To storyboard and create a short animation.	-To explain how a sprite moves in an existing project -To create a program to move a sprite in four directions -To adapt a program to a new context -To develop my program by adding features -To identify and fix bugs in a program -To design and create a maze-based challenge	-To know and understand what variables are. -To write algorithms that use variables. -To explain how variables are used in programs. -To debug programs containing variables. -To be able to program a BBC micro:bit using variables. -To predict how variables will be used in programs. -To debug programs involving random number variables.
Accreditations/ end points in Year 11 only	Entry: 105381 Word processing in microsoft word Alignment table-  105381 Word processing in...	Level one: 122049 Exploring the scratch programming interface and basic commands Alignment table-  122049 Exploring the scra...	Level one: 71638 Programming with scratch (unit 6) Alignment table-  71638 Programming with sc...	Level one: 122051 Introduction to variables and data types Alignment table-  122051 Introduction to variables and ...

Computing Term 6				
	Scheme A	Scheme B	Scheme C	Scheme D
Topic	Early Data Handling Skills	Creating and Interpreting Pictograms	Classifying and Organising Information	Recording and Analysing Data
Composite Skill	To be able to group data	To be able to use and create Pictograms	To be able to use and create a Branching Database	To be able to use and create a Flat-file Database
Component skills	-To be able to label objects -To identify that objects can be counted -To describe objects in different ways -To count objects with the same features - To answer questions about groups of objects.	-To recognise that we can count and compare objects using tally charts -To recognise that objects can be represented by pictures -To create a pictogram -To select objects by attribute and make comparisons -To explain that we can present information using a computer.	-To create questions with yes/no answers -To identify the attributes needed to collect data about an object. -To create a branching database -To plan the structure of a branching database	-To use a form to record information -To compare paper and computer-based databases. -To outline how you can answer questions by grouping and then sorting data -To explain that tools can be used to select specific data. -To use a real-world database to answer questions
Accreditations/ end points in Year 11 only	Pre entry: 82983 Early sorting Alignment table-  82983 Early sorting	Entry level: 117195 Interpreting and representing data Alignment table-  117195 Interpreting and represe...	Entry level: 73912 Data handling: Venn and tree diagrams Alignment table-  73912 Data handling: Venn and tr...	Entry level: 73912 Data handling: Venn and tree diagrams Alignment table-  73912 Data handling: Venn and tr...