



Chadsgrove Curriculum Long Term Planning: Computing

Curriculum Intent

At Chadsgrove, the Computing Long Term Plan offers a structured sequence of lessons, helping Teachers to ensure that they have covered the skills required to meet the aims of the National Curriculum and accredited courses. The content allows for a broad, deep understanding of computing and how it links to pupils' lives. It offers a range of opportunities for consolidation, challenge and variety. This allows pupils to apply the fundamental principles and concepts of computer science. They develop analytical problem-solving skills and learn to evaluate and apply information technology. It also enables them to become responsible, competent, confident and creative users of information technology.

In the Navigators and Pioneers Curriculum Pathways, the National Curriculum is followed incorporating a thematic approach. Teachers will use National Curriculum Learning Outcomes and further differentiate these to create learning opportunities, based upon individual pupils' needs, as detailed in Medium Term Plans.

For pupils on the Navigators Curriculum Pathway:

The focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully.

For pupils on the Pioneers Curriculum Pathway:

Lessons still focus on algorithms, programming and coding but in a more complex way and for different purposes. Pupils will also develop their knowledge of computer networks, internet services and the safe and purposeful use of the internet and technology.

Skills learned through both pathways are used to support data presentation.

In Pioneers 2, pupils follow WJEC Entry Level Pathways units in ICT at Entry Levels 2 and 3.

The Computing curriculum now also introduces pupils to Artificial Intelligence (AI) in an age and ability appropriate way. Pupils will learn how AI is used in everyday life, from voice assistants and predictive text to image recognition, and consider how such technologies impact their digital world. This learning promotes curiosity, creativity and responsible use of emerging technologies, preparing pupils for a digital future that increasingly includes AI.

Curriculum Implementation

Each lesson contains revision, analysis and problem-solving. Through the sequence of lessons, we intend to inspire pupils to develop a love of the digital world and see its place in their future. Cross-curricular links are also important in supporting other areas of learning. Lessons help pupils to build on prior knowledge at the same time as introducing new skills and challenges.

Each term, pupils in Navigators 3 and Pioneers 1 and 2 take part in focused lessons alongside four sessions designed to consolidate their learning and deepen their understanding of equality and diversity. They will also follow the 'Festival of the Month' where appropriate.



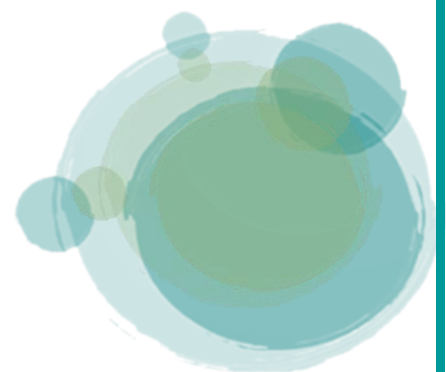
Embedding AI and Emerging Technologies

- Pupils in the Navigators pathway will develop an awareness of Artificial Intelligence (AI) through familiar examples such as voice assistants, translation tools, image filters and online recommendations.
- Pupils in the Pioneers pathway will be aware of and explore selected AI tools under strict supervision, building understanding of how computers can appear to “learn” and support creative work.

AI awareness and safety will be embedded within all topics, reinforcing responsible use, online safety, and the importance of human guidance.

Cross Curricular Opportunities

- **Maths:** AI pattern spotting, number recognition apps and graph interpretation tools
- **English:** Use AI to generate story prompts, edit writing or illustrate texts
- **Enterprise (Post 16):** Explore how AI is used in design and marketing (for example logo generation or product mock ups)
- **Life Skills / PfA:** Explore assistive AI technologies that improve accessibility, such as speech to text or predictive communication aids



Navigators Curriculum Pathway

<u>Navigators</u> <u>1</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2026-27	Data Handling – Making Decisions <u>Key Skills</u> • Begin to sort, classify or group various objects progressing from practical activities to the use of ICT, e.g., practically sorting fruit into colours, types or shapes, and then on-screen. • Make choices about the buttons/icons to press, touch or click on when using simple software/hardware. • With support, collect information by taking photographs or collecting objects.	Modelling, Simulation and programming <u>Key Skills</u> • Make choices about the buttons and icons pressed, touched or clicked on • Begin to understand that computers can represent real or imaginary situations • Be aware that different choices made using a program on the computer can produce different outcomes	Control and Monitoring <u>Key Skills</u> • Respond to simple instructions to press a sequence of buttons on a programmable robot. • Use a variety of electronic toys in play situations, e.g., dance mats, Bee-Bots, and remote control toys, • Explore simple games on screen using appropriate access devices • Be aware that the computer keyboard can be used to control objects on screen • Manage a device by correctly closing websites or apps and safely turning on and off • Play on a touch screen game and use computers/keyboards/mouse in role play
	<u>Cross-Curricular Links</u> All About Me	<u>Cross-Curricular Links</u> Let's Build	<u>Cross-Curricular Links</u> Out and About
	<u>E-Safety/AI Awareness</u> Begin to recognise that computers can help people spot patterns or make choices by sorting and counting information. Talk about how computers might “guess” or “suggest” things based on what they have learned before (e.g. a shopping website suggesting similar items). Begin to understand that people still need to check and decide if the computer’s choice makes sense.	<u>E-Safety/AI Awareness</u> Begin to understand that computers can show pretend worlds (e.g. games or simulations) to help us test ideas safely. Recognise that some games and programs change or react depending on what we do, a simple idea of how computers can “learn” from choices. Begin to understand that computers follow rules, but newer programs can improve or change automatically when given more information.	<u>E-Safety/AI Awareness</u> Know that some toys and devices can sense or respond to what people do, like robots that stop when they hit something or follow a line. Recognise that smart devices (e.g. lights, speakers, phones) can listen or notice things and respond automatically. Begin to understand that people create and control these devices, and should always use them safely and kindly.

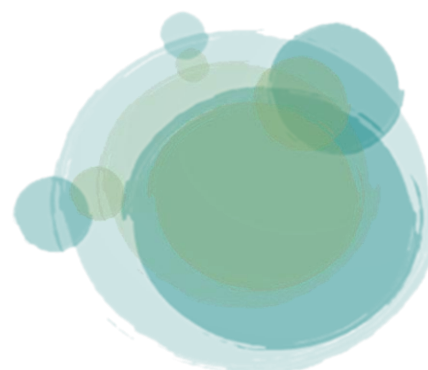
<u>Navigators</u> <u>1</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2027-28	Digital Research <u>Key Skills</u> - Recognise technology that is used at home and in school - Know that ICT sources e.g. the learning platform and Internet can be used to find things out. - Know that information can be in different forms, e.g. video, pictures and sound, as well as text. <u>Cross-Curricular Links</u> Wonderful World	Text and Multimedia <u>Key Skills</u> - Use a keyboard in play writing - Move objects on a screen. - Input commands using a mouse to control a cursor and use the left click to select options OR use finger control to interact with a tablet (double tap, swipe) - Input commands using the space bar, backspace, enter, letters and numbers on a keyboard on any device, including on a tablet <u>Cross-Curricular Links</u> Perfect Plants	Communicating and Collaborating <u>Key Skills</u> - Explore simple web-based communication tools with adult support e.g. the learning platform - Participate in simple video conferencing and webcam activities with adult help <u>Cross-Curricular Links</u> Journeys
	<u>E-Safety/AI Awareness</u> Begin to understand that some websites and devices use computer programs to help find information quickly (e.g. search engines or smart assistants). Recognise that computers sometimes choose what to show first, but it might not always be the best or correct answer. Know that adults can help check if information is true or safe.	<u>E-Safety/AI Awareness</u> Begin to understand that computers can predict or suggest words or pictures to help when writing or creating. Recognise that spell checkers and autocorrect are examples of computers “learning” from what people type. Know that we should always check suggestions because computers sometimes get things wrong.	<u>E-Safety/AI Awareness</u> Begin to understand that some online communication tools use computer programs to translate, filter or connect people safely. Recognise that some messages or voices online may come from a computer (e.g. automated responses or chatbots). Know that pupils should only communicate with people they know and trust, and always tell an adult if something doesn’t feel right.
National Curriculum KS2	- design, write and debug programs - use sequence, selection, and repetition in programs - use logical reasoning - understand computer networks including the internet - use search technologies effectively - select, use and combine a variety of software - use technology safely		

<u>Navigators</u> <u>2</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2025-26	Talking Books <u>Key Skills</u> • Make decisions about the stories and what is to be included • Take photographs using a digital camera • Record sounds using the computer sound recorder with help • Assemble pictures, sounds and clip art to create pages with accompanying text, where appropriate <u>Cross-Curricular Links</u> Marvellous Me <u>E-Safety/AI Awareness</u> Begin to recognise that computers can help combine pictures, voices and text to make a story come alive. Begin to understand that some story apps or talking books can speak automatically using a computer voice. Know that some computer voices sound real but are not a person, they are made by a program. Talk about how computers can choose pictures or words that fit the story, but people decide if they're right	Control and Monitoring <u>Key Skills</u> • Respond to simple instructions to operate a device requiring multiple instructions • Explore 'what happens if...' • Explore toys that simulate control devices with the intention of finding out how they work e.g. traffic light, till, microwave, scanner • Understand what commands are needed to control different devices, e.g., make a noise to activate a toy; press a button to make it work • Give commands/ instructions e.g. forward, backwards, go, stop, when using simple software/ hardware <u>Cross-Curricular Links</u> Rise of the Robots <u>E-Safety/AI Awareness</u> Begin to understand that some devices and toys can sense what is happening and respond, like lights that turn on when it's dark, or sensors that stop a robot when it meets an obstacle. Recognise that these are examples of computers making simple decisions automatically. Begin to understand that more advanced devices can "learn" what to do by repeating or practising but people are always in charge. Know that all machines must be used safely and kindly.	Making Pictures <u>Key Skills</u> • Experience creating representative drawings using an appropriate access device • Widen their experience of painting tools • Have opportunities to communicate about pictures and compare them to real life • Experience making decisions about when their work is complete and print it out <u>Cross-Curricular Links</u> Water <u>E-Safety/AI Awareness</u> Begin to understand that computers can help create or change pictures, sometimes automatically. Recognise that some pictures seen online or in apps might be made by a computer, not a person. Talk about how it's important to be honest about whether a picture is real or computer-made.

<u>Navigators</u> <u>2</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2026-27	Digital Research <u>Key Skills</u> - Understand what a computer is and the different uses of computers i.e. learning, communicating, finding information, playing games etc. - Begin to use icon based hyperlinks and navigation buttons - Select and use technology for particular purposes.	Images, Video and Animation <u>Key Skills</u> - Be aware that still objects can be animated using the computer - Take a photograph and use it in an app - Change tools such as brush size and colour - Review experiences by observing recordings of play, visits and activities - Interact and explore their environment using multimedia equipment, including digital cameras, video cameras, microscopes, webcams and visualisers to capture still and moving images. - Be aware that still and moving digital images can be transferred to the computer, saved and reviewed.	Communicating and Collaborating <u>Key Skills</u> - Be aware of the use of different forms of electronic communication via Teacher-led activities and free play, e.g. sending an email to another class. - Be aware that there is a range of ICT tools for communicating, e.g., webcams, text and email
	<u>Cross-Curricular Links</u> Our Environment	<u>Cross-Curricular Links</u> Jungle Beat	<u>Cross-Curricular Links</u> Around the World
	<u>E-Safety/AI Awareness</u> Begin to understand that some websites and devices use computer programs to help find information quickly (e.g. search engines or smart assistants). Recognise that computers sometimes choose what to show first, but it might not always be the best or correct answer. Know that adults can help check if information is true or safe.	<u>E-Safety/AI Awareness</u> Begin to understand that computers can help create or change pictures, sometimes automatically. Recognise that some pictures seen online or in apps might be made by a computer, not a person. Talk about how it's important to be honest about whether a picture is real or computer-made.	<u>E-Safety/AI Awareness</u> Begin to understand that some online communication tools use computer programs to translate, filter or connect people safely. Recognise that some messages or voices online may come from a computer (e.g. automated responses or chatbots). Know that pupils should only communicate with people they know and trust, and always tell an adult if something doesn't feel right.

<u>Navigators</u> 2	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2027-28	Data Handling – Making Decisions <u>Key Skills</u> - Sort physical objects, take a picture and discuss what I have done. - With support, produce simple pictograms - Identify a chart. - Present simple data on a digital device.	Modelling, Simulation and programming <u>Key Skills</u> - Be aware that computers can make imaginary things happen on-screen, which may not happen in everyday life - Use simple software to make something happen - Use software to represent real life situations/environments	Music and Sound <u>Key Skills</u> - Choose pre-recorded sounds in a piece of software - Be aware that a range of ICT software and equipment can be used to select, control and change sounds - Record sounds with different resources - Record sounds/voices in storytelling and explanations
	<u>Cross-Curricular Links</u> Our bodies and minds	<u>Cross-Curricular Links</u> Clever Construction	<u>Cross-Curricular Links</u> Pirates
	<u>E-Safety/AI Awareness</u> Recognise that computers can help people spot patterns or make choices by sorting and counting information. Talk about how computers might “guess” or “suggest” things based on what they have learned before (e.g. a shopping website suggesting similar items). Begin to understand that people still need to check and decide if the computer’s choice makes sense.	<u>E-Safety/AI Awareness</u> Begin to understand that computers can show pretend worlds (e.g. games or simulations) to help us test ideas safely. Recognise that some games and programs change or react depending on what we do, a simple idea of how computers can “learn” from choices. Begin to understand that computers follow rules, but newer programs can improve or change automatically when given more information.	<u>E-Safety/AI Awareness</u> Begin to understand that some songs or sounds can be made <i>by a computer, not a person</i>. Talk about how computers can <i>copy or change</i> voices, but that it’s still important to use our <i>own voices</i> respectfully. Recognise that “voice assistants” (e.g. Alexa, Siri) can answer questions, but they are <i>not real people</i>.
National Curriculum KS2	- design, write and debug programs - use sequence, selection, and repetition in programs - use logical reasoning - understand computer networks including the internet - use search technologies effectively - select, use and combine a variety of software - use technology safely		

<u>Navigators</u> <u>3</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2025-26	Design • Change the colour and pattern of elements. • Position and rotate objects on a design. • Position objects in relation to each other. • Resize, rotate, flip and arrange objects behind/in front of each other. <u>Cross-Curricular Links</u> People	Text and Images • Change the background colour of a page. • Add, resize and position images (pictures) on a page. • Type and position text on a page, if possible using capital letters and punctuation. • Label pictures with text. • Use word-banks for writing sentences about pictures. <u>Cross-Curricular Links</u> Recycling	Comic Creation • Add, resize and organise colour or picture backgrounds. • Add, resize, organise characters/object to different panels. • Add narration using text and direct speech using speech bubbles. <u>Cross-Curricular Links</u> Festivals and Food
	<u>E-Safety/AI Awareness</u> Recognise that computers can help change colours, patterns and shapes automatically. Begin to understand that some design programs can suggest layouts or ideas based on what people have made before. Talk about how people still need to make creative choices, the computer doesn't know what looks best or feels right.	<u>E-Safety/AI Awareness</u> Recognise that computers can suggest pictures, words, or layouts to match what someone is typing or creating. Begin to understand that some pictures online might be made by a computer, not a camera. Talk about checking if images are real, kind, and used fairly. Know that computers can help us write (through word prediction or spell check), but we must choose the right words ourselves.	<u>E-Safety/AI Awareness</u> Begin to understand that computers can help add voices, pictures or backgrounds to a story automatically. Recognise that some story or comic apps can suggest what happens next, this is a simple example of computers "guessing." Talk about how using a computer to make a comic is still the pupil's story and ideas. Know that computers can be used to share stories safely, but always with adult permission.



<u>Navigators</u> <u>3</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2026-27	Music Creation • Create a rhythm using a pattern of beats. • Create digital sounds using patterns and shapes. • Create a simple melody using patterns and adjust tempo.	Data Handling • Understand what data is and collect it as a tally. • Use software to label a pictogram and add data to each column. • Edit a table with correct titles and numbers. • Use software to create a bar chart/pie chart/line chart suitable for the data. • Interpret a pictogram/bar chart/line chart.	Programming • Place instructions into the correct order (sequence) to make something work. • Use direction arrows to move an on-screen object (character/sprite) to achieve an objective. • Predict a route and sequence direction commands (algorithm) to achieve an objective. Correct the errors if necessary (debug). • Predict a route and sequence distance commands to program an on-screen object to achieve an objective. • Predict and sequence movement and pen commands to program the drawing of different 2D shapes. • Sequence code blocks, including movements and execute (start program) blocks to write a program to achieve an objective.
	<u>Cross-Curricular Links</u> Victorian Britain	<u>Cross-Curricular Links</u> Life Cycles of Animals and Plants	<u>Cross-Curricular Links</u> Seasons/ The Weather
	<u>E-Safety/AI Awareness</u> Begin to understand that some songs or sounds can be made <i>by a computer, not a person</i>. Talk about how computers can <i>copy or change</i> voices, but that it's still important to use our <i>own voices</i> respectfully. Recognise that "voice assistants" (e.g. Alexa, Siri) can answer questions, but they are <i>not real people</i>.	<u>E-Safety/AI Awareness</u> Recognise that computers can help people spot patterns or make choices by sorting and counting information. Talk about how computers might "guess" or "suggest" things based on what they have learned before (e.g. a shopping website suggesting similar items). Begin to understand that people still need to check and decide if the computer's choice makes sense.	<u>E-Safety/AI Awareness</u> Begin to understand that computers can show pretend worlds (e.g. games or simulations) to help us test ideas safely. Recognise that some games and programs change or react depending on what we do, a simple idea of how computers can "learn" from choices. Begin to understand that computers follow rules.

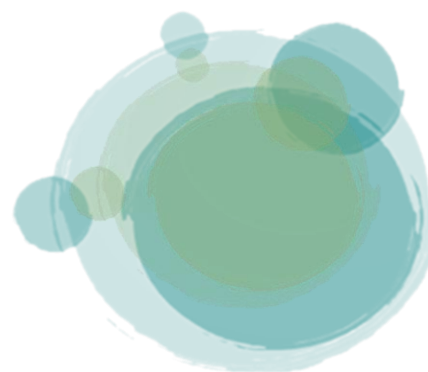
<u>Navigators</u> <u>3</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2027-28	E Safety - Understand what the internet is and how people use it. - Understand what personal information is and why we keep personal information private. - Why do websites want personal information. - Identify when and where to go for help when concerned.	Mouse and Keyboard Skills - Move the mouse or trackpad and left click to select an object. - Drag and drop with mouse or trackpad to move objects around the screen. - Find letters or numbers on a keyboard. - Begin touch typing with home row keys.	Digital Art - Change the colour of individual pixels to accurately re-create basic artwork. - Make changes where required. - Change the colour of individual pixels to accurately re-create detailed artwork. - Use zoom controls to help fill small shapes.
	<u>Cross-Curricular Links</u> Digital Photography	<u>Cross-Curricular Links</u> Change	<u>Cross-Curricular Links</u> Water
	<u>E-Safety/AI Awareness</u> Begin to recognise that some websites, games, or apps may use computer “robots” or “chat helpers” that talk or make suggestions. Talk about how computers can <i>seem smart</i> but still make mistakes or say unkind things and that children should always tell an adult if something feels wrong or confusing. Reinforce that messages or pictures online might be <i>made by a computer</i> , not a real person.	<u>E-Safety/AI Awareness</u> Recognise that computers can <i>respond to what people do</i> using a mouse, trackpad or keyboard. Begin to understand that computers can <i>predict or suggest words</i> while typing (e.g. autocorrect or predictive text). Talk about how these suggestions are made by a computer and may not always be right.	<u>E-Safety/AI Awareness</u> Begin to understand that computers can help create or change pictures, sometimes automatically. Recognise that some pictures seen online or in apps might be made by a computer, not a person. Talk about how it’s important to be honest about whether a picture is real or computer-made.
National Curriculum KS3	- design, use and evaluate computational abstractions - understand several key algorithms - use two or more programming languages - understand simple Boolean logic - hardware and software components - understand how instructions are stored and executed - undertake creative projects that involve selecting, using, and combining multiple applications - create, re-use, revise and re-purpose digital artefacts for a given audience - use technology safely		

Pioneers Curriculum Pathway

<u>Pioneers 1</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2025-26	Painting <u>Key Skills</u> • Paint with different colours • Paint with different brushes • Create shapes • Format text • Resize text and images • Save their paintings in their folder • Fill an area with a colour • Undo and redo • Add text	Word Processing <u>Key Skills</u> • Type with two hands • Use shift, space and enter correctly • Use undo and redo • Make text bold, italic or underline • Have some knowledge of the location of letters and symbols on the keyboard • Select text in different ways • Save their work in their folder • Edit text using backspace, delete and the arrow keys • Format the font. • Select single words	Using The Internet <u>Key Skills</u> • Search using the words "for kids" • Follow a web link • Locate their own blog • Understand how to blog safely and responsibly • Recognise common websites to which search results are linked • Upload photos to a blog • Identify search results that will give some useful information • Know where to find the address of a link • Log in and post a blog or comments
	<u>Cross-Curricular Links</u> Africa	<u>Cross-Curricular Links</u> Our Community/Britain	<u>Cross-Curricular Links</u> Celebrations/Food and Drink
	<u>E-Safety/AI Awareness</u> Recognise that some paint tools can suggest colours or fill areas automatically. Understand that computers can adjust or enhance artwork based on user choices. Explore, under supervision, an AI-assisted art or photo tool to see how computers can change images creatively.	<u>E-Safety/AI Awareness</u> Recognise that computers can check spelling and suggest words or corrections. Understand that some programs learn writing styles to offer better suggestions. Explore, under supervision, how predictive text or grammar tools work and discuss when suggestions are helpful or incorrect.	<u>E-Safety/AI Awareness</u> Recognise that search engines use AI to choose and rank results. Understand that not all information online is accurate or human-written. Explore, under supervision, how different search words affect results and discuss how to spot reliable sources.

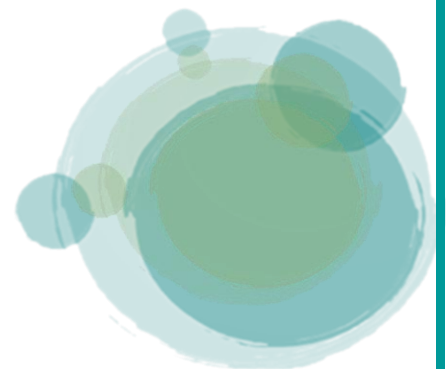


<u>Pioneers 1</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2026-27	Computer Skills <u>Key Skills</u> - Click and drag with a mouse or trackpad - Switch on and shutdown a computer - Launch an application by double clicking it - Confidently double click with a mouse or trackpad - Save work <u>Cross-Curricular Links</u> Victorian Britain	Computer Art <u>Key Skills</u> - Access an appropriate program for achieving a specific task; - Switch between program tools to produce different techniques; - Alter the formatting of a tool to adjust the colour or size. - Select appropriate tools with confidence and independence. - Recreate a piece of art using a computer program; - Manipulate shapes and objects to recreate an art style <u>Cross-Curricular Links</u> The Human Body	Online Safety <u>Key Skills</u> - Open a web browser - Recall some of the SMART rules for Internet safety - Know who to tell if someone online asks for personal information; - Apply their knowledge of online safety to help others make safe choices - Make links between the online and offline world - Recognise which personal information they should keep safe from strangers <u>Cross-Curricular Links</u> Asia
	<u>E-Safety/AI Awareness</u> Recognise that computers can <i>respond and adapt</i> to user actions. Understand that some systems <i>learn</i> what we use most. Explore, under supervision, AI tools that support use, such as voice commands or speech recognition.	<u>E-Safety/AI Awareness</u> Know that some art tools can suggest colours, filters or layouts. Understand that computers can copy or recreate artistic styles. Explore, under supervision, an AI art tool to compare computer-made and pupil-made designs.	<u>E-Safety/AI Awareness</u> Recognise that some websites recommend or filter content automatically. Understand that not all online information is real or trustworthy. Explore, under supervision, how search results or suggestions change and discuss why.

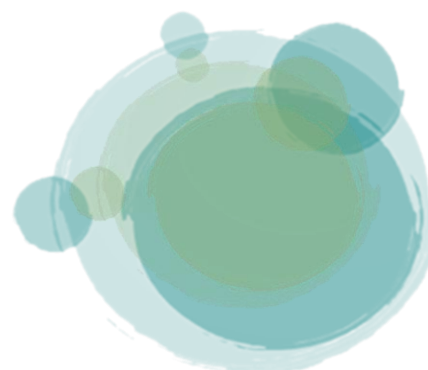


<u>Pioneers 1</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2027-28	Programming with Scratch Jr <u>Key Skills</u> • Open the ScratchJr app and start a new project • Add new characters and backgrounds • Use blocks for movement in different directions • Create short sets of sequenced instructions • Use a repeat block for a section of instructions and specified number of times • Predict the behaviour of a character, based on a sequence of instructions • Edit the colours and other features of characters or sprites; • Create longer sequences of more complex instructions • Use different end blocks, including repeat forever • Change the size of characters to grow or shrink • Hide and show characters with an instruction block • Program two or more characters with instructions at the same time	Programming Toys <u>Key Skills</u> • Create step-by-step instructions using pictures • Write and follow detailed step-by-step instructions • Direct a Bee-Bot (or similar programmable toy) to a toy • Program a Bee-Bot (or similar programmable toy), one instruction at a time, using the arrow buttons • See how a product changes when they change the instructions • Evaluate and improve their sequence (debug) • Say what an algorithm is • Say why it is important to be precise when writing an algorithm • Program a Bee-Bot (or similar programmable toy) using the arrow buttons • Start their programming sequence again if they need to	Using and Applying <u>Key Skills</u> • Turn on a computer and open an application • Type letters and symbols, including use of the shift key • Format text in different ways (bold, italic, underline) • Draw different shapes using paint software • Use a brush in a paint application and change the size and colour • Move, resize, minimise and restore windows • Select text and change the size, type or colour • Use Undo and Redo effectively • Edit text using the arrow keys and delete or backspace buttons • Create a particular image using shapes or brush tools • Click, double-click and drag objects; • Save and open files • Position shapes correctly
	<u>Cross-Curricular Links</u> How Things Move and Work	<u>Cross-Curricular Links</u> Mysteries and Time Travel	<u>Cross-Curricular Links</u> Rivers and Coasts
	<u>E-Safety/AI Awareness</u> Recognise that computers follow instructions exactly as given. Understand that repeating actions helps computers complete tasks efficiently. Explore, under supervision, how AI tools can predict or automate	<u>E-Safety/AI Awareness</u> Understand that computers and robots follow programmed commands step by step. Recognise that small changes in instructions can change outcomes. Explore, under supervision, how smart devices can make simple	<u>E-Safety/AI Awareness</u> Recognise that computers can suggest edits, layouts or corrections automatically. Understand that some applications learn preferences to make work easier. Explore, under supervision, AI-assisted features, such as spell

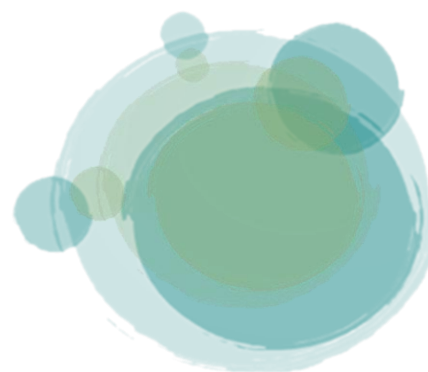
	sequences, comparing them to manually written code.	decisions, such as sensing obstacles or following a path.	check, autocorrect or auto-formatting.
National Curriculum KS3	• design, use and evaluate computational abstractions • understand several key algorithms • use two or more programming languages • understand simple Boolean logic • hardware and software components • understand how instructions are stored and executed • undertake creative projects that involve selecting, using, and combining multiple applications • create, re-use, revise and re-purpose digital artefacts for a given audience • use technology safely		



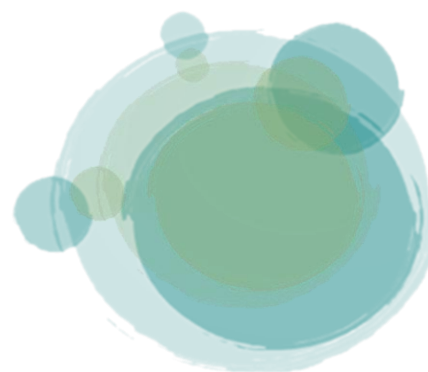
<u>Pioneers 2</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2025-26	WJEC: IT User Fundamentals • use IT for straightforward activities • respond appropriately to common IT errors and problems • review use of IT	WJEC: Presentation Software • Input and combine text and other information within presentation slides • Use presentation software tools to structure, edit and format slides • Prepare slides for presentation	ICT Project Pupils will select a project based on one of the units studied in the autumn or spring term. • apply key concepts from the chosen unit to develop a comprehensive ICT project • showcase their understanding and practical skills
	<u>E-Safety/AI Awareness</u> Recognise that some systems use AI to detect and correct common errors automatically. Understand that AI features can suggest solutions or improve efficiency when using software. Explore, under supervision, how AI tools can assist with troubleshooting or reviewing work, such as spell check or automatic file recovery.	<u>E-Safety/AI Awareness</u> Recognise that presentation software can suggest layouts, colours or image placements automatically. Understand that AI tools can enhance accessibility, for example by creating subtitles or improving design contrast. Explore, under supervision, how AI can support presentation design, such as using “Designer” or auto-formatting tools.	<u>E-Safety/AI Awareness</u> Recognise that AI can support research, writing and design tasks across different ICT areas. Understand the importance of checking and verifying computer-generated information. Explore, under supervision, suitable AI tools to support project work, such as generating ideas, improving layouts or checking accuracy.



<u>Pioneers</u> <u>2</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2026-27	WJEC: Online Basics • Use an online IT system to meet needs • Search for and use internet-based information • Use email software tools and techniques to compose and send messages.	WJEC: Audio and Video Software • Use audio and/or video hardware and software to capture sequences • Use audio and/or video hardware and software tools to edit sequences • Play and present audio and/or video sequences	ICT Project Pupils will select a project based on one of the units studied in the autumn or spring term. • apply key concepts from the chosen unit to develop a comprehensive ICT project • showcase their understanding and practical skills
	<u>E-Safety/AI Awareness</u> Recognise that search engines and websites use AI to filter and rank information. Understand that some emails or messages may be computer-generated and not from real people. Explore, under supervision, how AI tools influence search results or suggest contacts and content, discussing how to stay safe and make informed choices.	<u>E-Safety/AI Awareness</u> Recognise that some editing tools use AI to enhance sound or image quality automatically. Understand that AI can add effects, captions or remove background noise in recordings. Explore, under supervision, how AI features can support editing, such as auto-trim or smart enhancement tools.	<u>E-Safety/AI Awareness</u> Recognise that AI can support research, writing and design tasks across different ICT areas. Understand the importance of checking and verifying computer-generated information. Explore, under supervision, suitable AI tools to support project work, such as generating ideas, improving layouts or checking accuracy.



<u>Pioneers 2</u>	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
2027-28	WJEC: Imaging Software • use basic imaging software tools to create and edit images for a specific purpose. • import, position and manipulate images using standard features such as crop, resize and rotate. • apply simple effects or adjustments to enhance image quality and impact.	WJEC: Using Word Processing Software • Enter, edit and combine text and other information accurately within word processing documents. • Use word processing software tools to structure information, format and present documents.	ICT Project Pupils will select a project based on one of the units studied in the autumn or spring term. • apply key concepts from the chosen unit to develop a comprehensive ICT project • showcase their understanding and practical skills
	<u>E-Safety/AI Awareness</u> Recognise that some image tools use AI to enhance or correct photos automatically. Understand that AI can suggest filters, remove backgrounds or adjust colours to improve images. Explore, under supervision, how AI features can support editing, such as auto-enhance or smart selection tools.	<u>E-Safety/AI Awareness</u> Recognise that word processors can check spelling, grammar and suggest wording automatically. Understand that AI tools can improve layout or readability of text. Explore, under supervision, how AI-assisted features such as predictive text, smart compose or editor tools can support writing tasks.	<u>E-Safety/AI Awareness</u> Recognise that AI can support research, writing and design tasks across different ICT areas. Understand the importance of checking and verifying computer-generated information. Explore, under supervision, suitable AI tools to support project work, such as generating ideas, improving layouts or checking accuracy.



Curriculum Impact

Learning in Computing will be enjoyed across the school. Teachers will have high expectations and quality evidence will be presented in a variety of forms. Pupils will use digital and technological vocabulary accurately, alongside a progression in their technical skills. They will be confident in using a range of hardware and software and will produce high-quality purposeful products. Pupils will see the digital world as part of their world, extending beyond school, and understand that they have choices to make. They will be confident and respectful digital citizens going on to lead happy and healthy digital lives.

Pupils will also develop an awareness of Artificial Intelligence and its role in modern technology. They will be able to identify examples of AI, understand its benefits and risks, and use AI powered tools safely and creatively. This ensures our pupils are not only competent ICT users but are prepared for a future shaped by intelligent systems.

Assessment is conducted via SOLAR, our digital assessment tool, utilising Chadsgrove P Steps. This structured approach ensures that each pupil's progress is tracked and evaluated against tailored educational milestones. All data from SOLAR is then entered termly on to a whole school spreadsheet. From there it can be seen how much progress pupils are making and interventions can be put into place if pupils are not making the progress they are expected to.

Meanwhile, pupils in Pioneers 2 follow an accredited WJEC course and will be assessed according to the specific criteria set out by WJEC, ensuring that pupils meet the necessary qualifications and learning objectives.

Pupils will also be working on individual personal targets (relating to their EHCP outcomes). Pupils' IEP targets relevant to their Computing development (taken from their EHCPs) are clearly linked to the pupils' work and this is detailed in Teachers' Medium Term Plans. Pupils' targets are regularly reviewed and monitored to ensure continued progression of both knowledge and skills.

Evidence of impact will be found in digital work folders, which will demonstrate pupil progress through marking and annotation from Teachers and annotated photographs of children whilst completing activities (if appropriate).

