Chadsgrove Curriculum Long Term Planning: Computing

Curriculum Intent

The Long Term Plan for Computing offers a structured sequence of lessons, helping teachers to ensure that they have covered the skills required to meet the aims of the Early Years Foundation Stage, 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 Key Stage 3, the Computing curriculum is designed to ensure that all pupils are provided with the opportunity to explore and understand the world in which they live whilst developing scientific skills and understanding. At Key Stage 3 the curriculum begins to focus on preparing pupils for qualifications and therefore as we trial different qualifications in Key Stage 4 this Long Term Plan will continuously be reviewed to ensure that pupils are developing the knowledge and skills they need in order to progress effectively.

Curriculum Implementation

In the Semi-Formal Pathway, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully.

In the Formal 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 learnt through both pathways are used to support data presentation.

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, see its place in their future and give teachers confidence. 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.

Pupils in the Pre-Formal Pathway access computing through the Thinking Skills elements of the Barrs Court Curriculum as well as aspects of the EQUALS Pre-Formal Curriculum. Further details can be found in the Pre-Formal Curriculum Long Term Plan.

Early Years – 2LS and 3LS – Although there is a focus for each term, pupils approach ICT and computing in a cross-curricular ways in line with the principles of the Early Years Foundation Stage

Pre-Formal Pathway – 4LS, 7LS, 10US and P14 follow an alternative programme based around the Barrs Court Curriculum.

Semi-Formal Pathway – 5LS, 6LS, 9US and P13 follow the Semi-Formal Pathway. Within this Pathway there may be pupils who are identified as CUTA in Computing and need challenge, in which case the class teacher may wish to refer to the Formal Pathway to support this extension and differentiation. P13 pupils follow the Semi-Formal pathway. Within this Pathway they will have the opportunity to study some ICT units towards the OCR Life and Living Skills qualification.
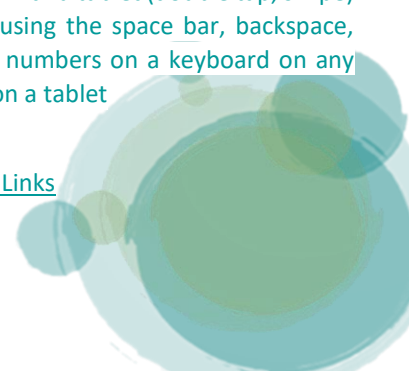
Formal Pathway – 8LS, 11US, 12US and P15 follow the Formal Pathway. Within this Pathway teachers may choose to use the Semi-Formal pathway resources to support pupils learning and to enable effective differentiation and personalisation. 12US/P15 follow the Formal Pathway working towards ICT accreditation in WJEC units at Entry Level and Level One.

All pupils have at least one computing/ICT lesson per week focused on the curriculum detailed below.

In Key Stages 3-5, each term contains focused lessons and four Equality and Diversity lessons for pupils to demonstrate skills learned so far and widen ther knowledge of equality and diversity.

Early Years Foundation Stage and Key Stage 1

	Early Years / Semi-Formal Pathway (2LS and 3LS)	Semi-Formal Pathway (5LS)
	Key Outcomes from EYFS Be confident to try new activities and show independence, resilience and perseverance in the face of challenge (PSED) Work and play cooperatively and take turns with others (PSED) Use a range of small tools (Fine Motor) Begin to show accuracy and care when drawing (Fine Motor) Use and understand recently introduced vocabulary (Literacy) Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (Creating with Materials) Share their creations, explaining the process they have used (Creating with Materials)	**Key Outcomes from EYFS** Be confident to try new activities and show independence, resilience and perseverance in the face of challenge (PSED) Work and play cooperatively and take turns with others (PSED) Use a range of small tools (Fine Motor) Begin to show accuracy and care when drawing (Fine Motor) Use and understand recently introduced vocabulary (Literacy) Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (Creating with Materials) Share their creations, explaining the process they have used (Creating with Materials)
Autumn 2022	**Text and Multimedia** Key Skills - Interact and respond to a range of ICT stimuli, including media and ICT texts - Use an interactive whiteboard/touch screens for mark making - Develop mouse control through simple activities on screen including 'click and drag' and 'drag and drop' Cross-Curricular Links All About Me Senses Autumn Harvest, Bonfire Night, Eid, Divali, Christmas	**Online Safety** Key Skills - Be able to tell an adult when something worrying or unexpected happens - Be kind to friends. Cross-Curricular Links People and Places
Spring 2023	**Online Safety** Key Skills - Learn how to access favourite activities online - Take part in activities that help them to identify who is and isn't a friend Cross-Curricular Links Water Winter Living Things Spring Chinese New Year, Pancake Day, Easter	**Images, Video and Animation** Key Skills - Choose different painting tools to create effect - Use a painting app and explore the paint and brush tools - Use a stamp tool - Fill sections using fill tool - Take a photograph - With support, take moving images with a video camera - With support, play back captured still or moving images, becoming familiar with the control buttons, e.g., using play, stop and pause. - Examine objects using a visualiser or microscope Cross-Curricular Links Amazing Animals

	Early Years / Semi-Formal Pathway (2LS and 3LS)	Semi-Formal Pathway (5LS)
Summer 2023	**Images, Video and Animation** Key Skills - Use paint programs for mark making - Explore talking photo albums and books - With support, take still photos with a digital camera Cross-Curricular Links Animals Clothes Summer	**Music and Sound** Key Skills - With support, record sounds and speech - Play sound games e.g. matching sounds to pictures - Be aware that computers and other devices can be used to record and play back sounds - Be aware that sound can be recorded on a computer or a sound device - Find ways to change your voice (tube, tin can, shouting to create an echo) Cross-Curricular Links Out at sea
Autumn 2023	**Data Handling – Making Decisions** Key Skills - Make simple decisions and choices and communicate them to clearly to others - Communicate likes and dislikes - Identify different kinds of information such as pictures, video, text and sound Cross-Curricular Links All About Me Toys Autumn Harvest, Bonfire Night, Eid, Divali, Christmas	**Data Handling – Making Decisions** Key Skills - 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. Cross-Curricular Links All about me
Spring 2024	**Digital Research** Key Skills - Explore a teacher selected website/program to find a desired page - Begin to use shortcuts such as icons on the desktop Cross-Curricular Links Transport Winter Chinese New Year Pancake Day Materials/Shape Spring Easter	**Modelling, Simulation and programming** Key Skills - 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 Cross-Curricular Links Let's build

	Early Years / Semi-Formal Pathway (2LS and 3LS)	Semi-Formal Pathway (5LS)
Summer 2024	**Control and Monitoring** Key Skills - Attend to devices which are controlled by ICT - Demonstrate an understanding of 1:1 correspondence - Understand cause and effect - Respond to simple instructions to operate a sequence of switches. - Track a programmable robot as it moves across the floor - Experience simple apps and software Cross-Curricular Links People who help us Pets Summer	**Control and Monitoring** Key Skills - 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 Cross-Curricular Links Out and about
Autumn 2024	**Communicating and Collaborating** Key Skills - Use different forms of electronic communication during play e.g. walkie talkies, phones, sound recording devices Cross-Curricular Links All About Me Nursery Rhymes Autumn Harvest, Bonfire Night, Eid, Divali, Christmas	**Digital Research** Key Skills - 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. Cross-Curricular Links Wonderful World
Spring 2025	**Music and Sound** Key Skills Listen to music, rhymes, songs and stories Explore ways of making and listening to sounds using simple programs and devices, e.g., karaoke machines, music mats and piano keyboards With help, use buttons to play back sounds on a computer and a sound player Cross-Curricular Links Light and Sound Winter Keeping Fit Spring Chinese New Year, Pancake Day, Easter	**Text and Multimedia** Key Skills 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 Cross-Curricular Links Perfect plants

Key Stage 2:

	Semi-Formal Pathway (6LS) (EYFS)	Formal Pathway (8LS) (National Curriculum, Y1 and Year 2)
	Key Outcomes from EYFS Be confident to try new activities and show independence, resilience and perseverance in the face of challenge (PSED) Work and play cooperatively and take turns with others (PSED) Use a range of small tools (Fine Motor) Begin to show accuracy and care when drawing (Fine Motor) Use and understand recently introduced vocabulary (Literacy) Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (Creating with Materials) Share their creations, explaining the process they have used (Creating with Materials)	Key Outcomes from Key Stage 1 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
Autumn 2022	**Digital Research** Key Skills • 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. Cross-Curricular Links Our Environment	**Computer Skills** Key Skills • 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 Cross-Curricular Links Our Environment
Spring 2023	**Images, Video and Animation** Key Skills • 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. Cross-Curricular Links Jungle beat	**Computer Art** Key Skills • 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 Cross-Curricular Links Jungle beat

	Semi-Formal Pathway (6LS) (EYFS)	Formal Pathway (8LS) (National Curriculum, Y1 and Year 2)
Summer 2023	**Communicating and Collaborating** Key Skills • 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 Cross-Curricular Links Around the world	**Online Safety** Key Skills • 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 Cross-Curricular Links Around the world
Autumn 2023	**Data Handling – Making Decisions** Key Skills • 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. Cross-Curricular Links Our bodies and minds	**Programming with Scratch Jnr** Key Skills • 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 Cross-Curricular Links Our bodies and minds

	Semi-Formal Pathway (6LS) (EYFS)	Formal Pathway (8LS) (National Curriculum, Y1 and Year 2)
Spring 2024	**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 <u>Cross-Curricular Links</u> Clever construction	**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 <u>Cross-Curricular Links</u> Clever construction
Summer 2024	**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> Pirates	**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> Pirates

	Semi-Formal Pathway (6LS) (EYFS)	Formal Pathway (8LS) (National Curriculum, Y1 and Year 2)
Autumn 2024	**Text and Multimedia** <u>Key Skills</u> • Type letters with increasing confidence using a keyboard and tablet. • Print out work with support • Move and resize images with my fingers or mouse. <u>Cross-Curricular Links</u> New Adventures	**Technology Around Us** <u>Key Skills</u> • Recognise technology outside of the classroom • Describe what technology they use in their lives • Know that technology changes over time • Name some people who have helped shape information technology today • With support, think of ways in which information technology may change in the future • Identify examples of technology used in different settings • Describe how they use technology in their lives and explain the benefits of doing so <u>Cross-Curricular Links</u> New Adventures
Spring 2025	**Images, Video and Animation** <u>Key Skills</u> • Choose different painting tools to create effect • Use a painting app and explore the paint and brush tools • Use a stamp tool • Fill sections using fill tool • Take a photograph • With support, take moving images with a video camera • With support, play back captured still or moving images, becoming familiar with the control buttons, e.g., using play, stop and pause. • Examine objects using a visualiser or microscope <u>Cross-Curricular Links</u> Space and the solar system	**Sound and Motion** <u>Key Skills</u> • Use software to record sounds • Change sounds recorded • Save, retrieve and organise work • Use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound <u>Cross-Curricular Links</u> Space and the solar system
Summer 2025	**Online Safety** <u>Key Skills</u> • Explore onscreen activities that mimic real life • Begin to understand school rules for responsible Internet use <u>Cross-Curricular Links</u> Fantasy and magical worlds	**Presentation Skills** <u>Key Skills</u> • Insert slides, add and type in a text box • Save files in an organised folder structure • Search for files on the computer • Set windows side by side • Format text boxes and images • Reorder slides and present their presentation • Create folders • Print files • Add images • Format text and text boxes <u>Cross-Curricular Links</u> Fantasy and magical worlds

	Semi-Formal Pathway (6LS) (EYFS)	Formal Pathway (8LS) (National Curriculum, Y1 and Year 2)
Autumn 2025	**Talking Books** Key Skills • 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 Cross-Curricular Links Marvellous me	**Painting** Key Skills • 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 Cross-Curricular Links Marvellous me
Spring 2026	**Control and Monitoring** Key Skills • 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 Cross-Curricular Links Rise of the robots	**Word Processing** Key Skills • 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 Cross-Curricular Links Rise of the robots
Summer 2026	**Making Pictures** Key Skills • 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 Cross-Curricular Links Water	**Using The Internet** Key Skills • Search using the words "for kids" • Follow a weblink • 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 Cross-Curricular Links Water

Key Stage 3:

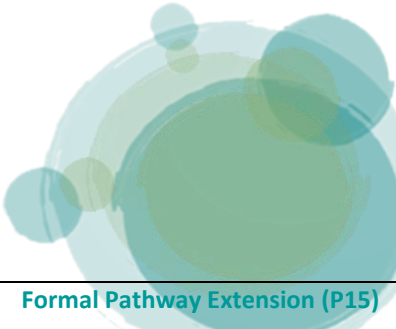|	Semi-Formal Pathway (9US, (National Curriculum Key Stage 1, Y1)	Formal Pathway Extension (11US, National Curriculum Key Stage 2, Y3)
Autumn 2021	**E Safety** • Understand what the internet is and how people use it. • Understand what personal information is and why we keep personal information private. • Why do websites want personal information. • Identify when and where to go for help when concerned. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**	**E Safety** • Understand what to do if something upsets you online. • Understand why and how people can be nasty online. • Describe the term 'sharing online' and why we need to get permission to share photos and videos of other people. • Understand why people pretend to be someone else online. • Understand why we only talk to people we know in the real world, when online. • Understand why we should not always trust what we read online and how to check • Understand the importance of being kind in the real world and also online. • Understand the importance of using avatars and how to make them. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**
Spring 2022	**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. E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**	**Comic Creation** • Add, resize and organise colour or picture backgrounds. • Add, resize, organise characters/objects to different panels. • Add narration using text and direct speech using speech bubbles. • Save comic with name and title. • Add audio recordings (optional). E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**

	Semi-Formal Pathway (9US, (National Curriculum Key Stage 1, Y1)	Formal Pathway Extension (11US, National Curriculum Key Stage 2, Y3)
Summer 2022	**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>E&D Lessons</u> April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**	**Storyboards** • Add and edit backgrounds. • Add and edit characters, including changing posture, expression and clothing. • Add narration and speech bubbles, including formatting text. • Duplicate objects to match scenes. • Search for objects to use. <u>E&D Lessons</u> April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**
Autumn 2022	**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>E&D Lessons</u> September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughou**	**Digital Art** • Use various lines and fill tools plus copy/paste and rotation to create pattern effects. • Use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects. • Use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics. <u>E&D Lessons</u> September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**
Spring 2023	**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>E&D Lessons</u> January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**	**Programming in Scratch** • Design, write and debug programs that accomplish specific goals. (Including outputs) • Use repetition in programs. • Work with various forms of inputs; keyboard, mouse and touch screen. • Write programs to simulate physical systems. <u>E&D Lessons</u> January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**

	Semi-Formal Pathway (9US, (National Curriculum Key Stage 1, Y1)	Formal Pathway Extension (11US, National Curriculum Key Stage 2, Y3)
Summer 2023	**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. E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**	**Music Creation** • Create ascending and descending scales. • Add chords evenly across the scales. • Add arpeggios and melodies. • Add a steady and even rhythm. • Use sampled sounds to create an effective mix. • Build beats, melody (tones) and effects. E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**
Autumn 2023	**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. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**	**Programming in Kodu** • Create a 3D place using various design tools • Write a program to control a character using inputs • Write a program with conditions to create an if statement (If the character touches an object it will disappear) • Add a multi-player aspect • Write a program with variables (scoring system) • Program operators (equals) to achieve a score and win a game. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**

	Semi-Formal Pathway (9US, (National Curriculum Key Stage 1, Y1)	**Formal Pathway Extension (11US, National Curriculum Key Stage 2, Y3)**
Spring 2024	**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. E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**	**Document Editing and Creation** • Copy and Paste text and images. • Find and replace words. • Format text for a purpose. • Add bullet points to make lists. • Experiment with keyboard shortcuts. E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**
Summer 2024	**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. E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**	**3D Design** • Understand and use 3D space on a grid. • Design cities/towns for a purpose and to a budget. • Re-create or design familiar 3D models using cubes, such as tables and chairs. • Use chisel tool to improve and adapt models. • Colour individual blocks or whole models. E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**

Key Stage 4/5:

	Semi-Formal Pathway (P13) (OCR Life and Living Skills ICT units/National Curriculum Key Stage 1, Y2)	Formal Pathway Extension (12US) (WJEC Entry 2/3 Award for IT Users)	Formal Pathway Extension (P15) (WJEC Level 1 Award for IT Users)
Autumn 2023	**E-Safety** • What are the dangers of sharing photos online? • People online are not always who they say they are. • Trusting information online. • Using the Internet responsibly. • Being respectful. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**	**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. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**	**Video Software** • Use video hardware and software to capture sequences. • Use video software tools to combine and edit sequences. • Play and present video sequences. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**
Spring 2024	**Using ICT to record and Edit Information (E1)** • 1.1 Use appropriate ICT equipment to record information E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**	**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 E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**	**Audio Software** • Use audio hardware and software to capture sequences • Use audio software tools to combine and edit sequences. • Play and present audio sequences. E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**

	Semi-Formal Pathway (P13) (OCR Life and Living Skills ICT units/National Curriculum Key Stage 1, Y2)	Formal Pathway Extension (12US) (WJEC Entry 2/3 Award for IT Users)	Formal Pathway Extension (P15) (WJEC Level 1 Award for IT Users)
Summer 2024	**Using ICT to record and Edit Information (E1)** • Use appropriate ICT resource to edit information E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**	**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. E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**	**Improving Productivity** • Plan the use of appropriate IT systems and software to meet requirements. • Use IT systems and software efficiently to complete planned tasks. • Review the selection and use of IT tools to make sure that work activities are successful. E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**
Autumn 2024	**E-Safety** • What are the dangers of sharing photos online? • People online are not always who they say they are. • Trusting information online. • Using the Internet responsibly. • Being respectful. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**	**Using Email** • Use email software tools and techniques to compose and send messages. • Manage incoming email effectively. E&D Lessons September – Yom Kippur October – Navaratri November – Birthday of Guru Nanak December – Christmas **E-Safety must continue to be embedded throughout**	To be arranged, depending on Post-16 choices
		Formal Pathway Extension	**Formal Pathway Extension (P15)**

	Semi-Formal Pathway (P13) (OCR Life and Living Skills ICT units/National Curriculum Key Stage 1, Y2)	(12US) (WJEC Entry 2/3 Award for IT Users)	(WJEC Level 1 Award for IT Users)
Spring 2025	**Using ICT to Communicate (E2)** • Select appropriate ICT communication resource to receive information • Use the interface features to receive information E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**	**Desktop Publishing** • Use appropriate designs and page layouts for a publication • Input text and other information into a publication • Use desktop publishing software techniques to edit and format a publication E&D Lessons January – Lohri – Maghi February – Chinese New Year March – Holi March – International Women's Day (Women in the IT industry) **E-Safety must continue to be embedded throughout**	To be arranged, depending on Post-16 choices
Summer 2025	**Using ICT to Communicate E2)** • Select appropriate ICT communication resource to send information. • Use the interface features to send information. E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**	**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 E&D Lessons April – Passover May – Vesak June – Corpus Christi July – Eid-Ul-Adha **E-Safety must continue to be embedded throughout**	To be arranged, depending on Post-16 choices

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 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.