

In order to prepare EYFS children adequately for when they begin to study the computing curriculum in Year 1, we use each area of the EYFS framework to help them to develop some of the fundamental computing skills across the year.

	Understanding the World	Literacy	Physical Development	Mathematics	Communication & Language	Personal, Social and Emotional Development	Expressive Arts & Design
Continuous Provision	<ul style="list-style-type: none"> • Role play area containing a range of technology such as old keyboards, phones, walkie-talkies so children can become familiar with them. 	<ul style="list-style-type: none"> • Phonics based games on the interactive whiteboard, iPads or children's PC for mouse skills which children can explore themselves. • Sequencing & ordering in the context of stories, giving instructions which are key coding skill. 		<ul style="list-style-type: none"> • Mathematics based and coding games on the interactive whiteboard, iPads or children's PC for mouse skills which children can explore themselves. • Using Beebots and mats with destinations, developing early coding techniques. 	<ul style="list-style-type: none"> • Games built around giving and receiving instructions ex:- one child says move forward 2 squares and the other follows the instruction. 	<ul style="list-style-type: none"> • Online safety videos such as Smartie the Penguin used to bring some initial awareness about the dangers of being on the internet. • Use of digital camera's during play where children can take photo's of each other and their environment. 	
Computer Lessons			<ul style="list-style-type: none"> • During Lent 2 term EYFS children have weekly computer lessons where the initial focus is on gaining the required fine motor skills to use a keyboard and control a mouse effectively. 				<ul style="list-style-type: none"> • During the Pentecost term EYFS children will be able to create simple digital pictures using paint techniques.

KS1 are currently following the Twinkl scheme of work.

KS1 Computing Curriculum Requirements

Computer Science

CS1 – Understand what algorithms are; how they are implemented as programs on digital device; and that programs execute by following precise and unambiguous instructions.

CS2- Create and debug simple programs.

CS3- Use logical reasoning to predict the behaviour of simple programs.

Information Technology

IT1 – Use Technology purposefully to create, organise, store, manipulate and retrieve digital content.

IT2 – Recognise common uses of information technology beyond school.

Digital Literacy

DL1 – 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.

	Advent 1	Advent 2	Lent 1	Lent 2	Pentecost 1	Pentecost 2
Year 1	Basic Computer Skills IT1 & DL1 <ul style="list-style-type: none"> Move the cursor using mouse/trackpad, switch on/shutdown computer, open/save files and drag objects. 	Painting IT1 <ul style="list-style-type: none"> Create/retrieve a picture using different colours/brushes, create shapes & fill areas, add text, improve work – make a poster. 	Online Safety IT1 & DL1 <ul style="list-style-type: none"> Creating and naming/dating content online, safely searching for images, SMART rules, personal information, email and making safe choices online. 	Word Processing IT1 <ul style="list-style-type: none"> Typing on a keyboard, symbols and saving files, editing text, select and format text 	Programming with ScratchJn CS1 & CS2 <ul style="list-style-type: none"> Create instructions using pictures, algorithms, write instructions to program a person, program a Bee-Bot, Debug a Bee-Bot, Program a Bee-Bot using a sequence. 	Programming with ScratchJn CS1 - CS3 <ul style="list-style-type: none"> Move a character at different speeds/distance. Learn to repeat instructions. Play a recorded sound. Create/debug simple program. Predict what will happen next.
Year 2	Word Processing (bespoke plans) IT1 <ul style="list-style-type: none"> Introduction to Microsoft word to create and edit documents using capital letters, full stops, buttons, undo, backspace, return key, highlighting. 	Computer Art IT1 <ul style="list-style-type: none"> Creating and editing computer art using a range of tools to reproduce a style of art. DL1 & IT1 Online Safety Using the Internet <ul style="list-style-type: none"> Digital footprints., keywords, recognise child friendly websites and kind/unkind behaviour, safe links/photos/blogs. 	Technology Around Us IT1 & IT2 <ul style="list-style-type: none"> Recognise different technologies in school and home and why they are used. 	Presentation Skills IT1 <ul style="list-style-type: none"> Revise key computer skills and learn to create folders. Learn to create a simple presentation. 	Preparing for Turtle Logo CS1-CS3 <ul style="list-style-type: none"> Use Turtle Logo to create, test and debug an algorithm, rotate the turtle, use the repeat command. Recognise language and give, follow and complete an algorithm. 	Programming Turtle Logo/Scratch CS1-CS3 <ul style="list-style-type: none"> Use turtle logo to draw shapes, repeat Use Scratch to draw shapes, repeat then add movement and sound, say something, use the green flag to start and use different sprites.

KS2 are currently following the Twinkl computing scheme of work.

KS2 Computing Curriculum Requirements

Computer Science

CS1- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems

CS2- Solve problems by decomposing them into smaller parts

CS3- Use sequence, selection, and repetition in programs

CS4- Work with variables and various forms of input and output

CS5- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Information Technology

IT1- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Digital Literacy

DL1- Use technology safely, respectfully and responsibly;

DL2-Recognise acceptable/unacceptable behaviour;

DL3-Identify a range of ways to report concerns about content and contact

DL4-Understand computer networks including the internet

DL5- Understand how networks can provide multiple services, such as the world wide web

DL6- Understand opportunities computer networks offer for communication and collaboration

DL7-Use search technologies effectively

DL8- Appreciate how results are selected and ranked

DL9 – How to be discerning in evaluating digital content

	Advent 1	Advent 2	Lent 1	Lent 2	Pentecost 1	Pentecost 2
Year 3	<u>Online Safety</u> DL1 - DL3 <ul style="list-style-type: none"> Introduction to Cyberbullying, Adverts, Keep passwords safe, Emails. 	<u>Logo and scratch</u> CS1, CS3, CS5 <ul style="list-style-type: none"> Using Logo and Scratch to create regular Polygons. 	<u>Drawing and Desktop Publishing</u> IT1 <ul style="list-style-type: none"> Draw/manipulate different shapes/lines, order/group objects, combine text/images, create effective layout. 	<u>Word Processing</u> DL1, IT1 <ul style="list-style-type: none"> Basic computer skills. Use Microsoft Word to change, align text, use bullets/numbering, ctrl key, text boxes. 	<u>Searchers & Surfers</u> DL4 - DL6 & DL7 - DL9 <ul style="list-style-type: none"> Understand what the internet is and how it works. How to use search engines to make safe searches. To use different website links to find reliable information. Different ways of copying/pasting images from a website. Create magazine article using research skills. 	<u>Presentation skills</u> IT1 <ul style="list-style-type: none"> Create templates, add themes, transitions and animations to slides. Insert audio/video.
Year 4	<u>Online Safety</u> DL1 - DL3, DL4 - DL6, DL7-DL9 <ul style="list-style-type: none"> Cyberbullying, creating safe online profile, Plagiarism, how to be a good digital citizen. Using search engines accurately. 	<u>Programming Turtle Logo</u> CS1 - CS5 <ul style="list-style-type: none"> Create and debug algorithms that use set position, fill different areas with colours, produce text and draw arcs. 	<u>Word Processing</u> IT1 <ul style="list-style-type: none"> Formatting images, using formatting tools to achieve effective layout, spellchecker, inserting/formatting tables, changing page layout, inserting hyperlinks. 	<u>Animation</u> IT1 <ul style="list-style-type: none"> Describe early animation before computers. Create an animation using one or more stick figures. 	<u>Scratch, Questions and Quizzes.</u> CS1, CS3 & CS4 <ul style="list-style-type: none"> Create/debug a quiz using sequence and selection, score variable, If then... else statements, loops, input/output information. 	<u>Communication & Collaboration</u> DL1 -DL4 <ul style="list-style-type: none"> Explore different ways of communicating online, understand email, collaborating online.

	Advent 1	Advent 2	Lent 1	Lent 2	Pentecost 1	Pentecost 2
Year 5	Online Safety DL1 - DL3 <ul style="list-style-type: none"> What is Spam? Creating powerful passwords False photography Scratch - designing games CS1 - CS5 Design and program an original game, adding features/effects to enhance the game, adding point scoring and levels to game code.	Flowol CS1 - CS4 <ul style="list-style-type: none"> Introduction to flowcharts, practise reading them as a sequence of instructions, designing their own to simulate physical systems. 	Radio station - Audacity IT1 <ul style="list-style-type: none"> Research and plan appropriate content for a radio podcast 	Radio station - Audacity IT1 Research and plan appropriate content for a radio podcast	3D modelling - Sketch up IT1 <ul style="list-style-type: none"> Drawing 3D shapes, creating 3D models to their own design. 	Strategic Searching Online DL7 - DL9 <ul style="list-style-type: none"> Find internet information using search engines, use Boolean operators to refine search, identify what makes a website trustworthy. Understand what page ranking is, use SEO.

	Advent 1	Advent 2	Lent 1	Lent 2	Pentecost 1	Pentecost 2
Year 6	Spreadsheets IT1 <ul style="list-style-type: none"> Entering data/formula, ordering and presenting it based upon calculations into a spreadsheet. Use a spreadsheet to solve problems by designing it for a specific purpose. 	Online Safety DL1 - DL3 & DL9 <ul style="list-style-type: none"> In person versus online bullying. Strategies to cope with it. Identifying secure websites. Online relationships and sharing information. Media shaping ideas about gender. Create an online safety quiz. 	Scratch: Animated stories CS1 - CS5 <ul style="list-style-type: none"> Creating animations for a story scene. Structure and control the timing of events. Control when objects need to be visible. Sequence events to create story narrative. Add voice, sounds and interactive features to a scene/story. 	Kodu Programming IT1 <ul style="list-style-type: none"> Investigate/Evaluate features of Kodu programming software. CS1, CS2, CS5 <ul style="list-style-type: none"> Program Kodu 3D software using when/do instructions. Use tools/features to create original landscape. Analyse/deconstruct code to determine its purpose. Program a character around a customised track. 	Film Making IT1 <ul style="list-style-type: none"> Use word to write a film script. Use digital recording devices to film/interview and then import. Use video editing software to turn film project into a movie and present it. DL6, DL7 - DL9 <ul style="list-style-type: none"> Using the internet to research film script topic. Locate/check appropriate digital content, credit sources. 	Know Your Network DL4 - DL6 <p>To know what computer networking is, know the advantages/disadvantages of a network, LAN,MAN, WAN, topology, protocols, internet and WWW differences, cloud computing, broadband and online streaming, malware and reducing risks of cybersecurity.</p>