



Computing Curriculum Overview

Silverdale St John's CE Primary School



2023/2024 2025/2026	Autumn - How Does It Work?	Spring - Watery Worlds	Summer - The Great Outdoors
Curlews Year R/1/2	Online Safety 1:1 Creating pictures 2:6 Technology Outside School 1.9	Animated Story Books 1:6 Making Music 2:7	Lego Builders 1:4 Maze Explorers 1.5
Bitterns Year 3/4	Online Safety 3:2 Animation 4:6 LOGO – 4:5	Presenting – Google Slides 3:9 Making Music 4:9	Coding 4:1 Spreadsheets 3:3
Harriers Year 5/6	Online Safety 4:2/5:2 3D Modelling 5:6	Word Processing – Google Docs 5:8 Game Creator 5:5	Coding 5:1 Spreadsheets 5:3
2022/2023 2024/2025	Autumn - Happy, Healthy Me!	Spring - Time Travel	Summer - Here, There & Everywhere
Curlews Year R/1/2	Online Safety Unit 2:2 Grouping and Sorting 1:2 Pictograms 1:3	Questioning 2:4 Coding 1:7	Spreadsheets 1.8 Presenting 2:8 Coding 2:1
Bitterns Year 3/4	Online Safety 4:2 Branching Databases 3:6 Coding 3:1	Email 3.5 Graphing 3:8	Touch Typing 3:4 Artificial Intelligence 4:10
Harriers Year 5/6	Online Safety 6:2 Spreadsheets – Google Sheets 5:9 Text Adventures 6:5	Databases 5:4 Quizzing 6:7	Blogging 6:4 Networks 6:6

Computing - Year A

2023/2024 2025/2026	Autumn - How Does It Work?	Spring - Watery Worlds	Summer - The Great Outdoors
Curlews Year 1 & 2	Online Safety 1:1 Creating Pictures 2:6 Technology Outside School 1:9	Animated Story Books 1:6 Making Music 2:7	Lego Builders 1:4 Maze Explorers 1:5
NC Links	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. Use logical reasoning to predict the behaviour of simple programs. Recognise common uses of information technology beyond school.	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 logical reasoning to predict the behaviour of simple programs. 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.
Topic outcomes	<p>Online Safety 1:1 Log in safely. Learn how to find saved work in the Online Work area and find teacher comments. Learn how to search Purple Mash to find resources. Become familiar with the icons and types of resources available in the topics section. Start to add pictures and text to work. explore the tools and Games section of Purple Mash. Learn how to open, save and print. Understand the importance of logging out.</p> <p>Creating Pictures 2:6 Learn the functions of the 2Paint a Picture tool. Learn about and recreate the Impressionist style of art (Monet, Degas, Renoir). Recreate Pointillist art and look at the work of pointillist artists. Learn about the work of Piet Mondrian and recreate the style using the lines template. Learn about the work of William Morris and recreate the style using the patterns template. Explore surrealism and eCollage.</p> <p>Technology Outside School 1:9 Walk around the local community and find examples of where technology is used. Record examples of technology outside school.</p>	<p>Animated Story Books 1:6 Introduce e-books and the 2Create a Story tool. Add animation to a story. Add sound to a story, including voice recording and music the children have composed. Work on a more complex story, including adding backgrounds and copying and pasting pages. Share e-books on a class display board.</p> <p>Making Music 2:7 Introduce making music digitally using 2Sequence. Explore, edit and combine sounds using 2Sequence. Add sounds to a tune to improve it. Think about how music can be used to express feelings and create tunes which depict feelings. Upload a sound from a bank of sounds into the Sounds section. Record their own sound and upload it into the Sounds section. Create their own tune using the sounds which they have added to the Sounds section.</p>	<p>Lego Builders 1.4 Compare the effects of adhering strictly to instructions, completing tasks without complete instructions. Follow and create simple instructions on the computer. Consider how the order of instructions affects the result.</p> <p>Maze Explorers 1.5 Understand the functionality of the direction keys. Understand how to create and debug a set of instructions (algorithm). Use the additional direction keys as part of an algorithm. Understand how to change and extend the algorithm list. Create a longer algorithm for an activity. Set challenges for peers. Access peer challenges set by the teacher as 2Dos.</p>
Bitterns Year 3 & 4	Online Safety 3:2 Animation 4:6 LOGO 4:5	Presenting – Google Slides 3:9 Making Music 4:9	Coding 4:1 Spreadsheets 3:3
NC Links	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
Topic outcomes	<p>Online Safety 3.2 Know what makes a safe password, how to keep passwords safe and the consequences of giving your passwords away. Understand how the Internet can be used to help us to communicate effectively. Understand how a blog can be used to help us communicate with a wider audience. Consider if what can be read on websites is always true. Look at a 'spoof' website. Create a 'spoof' webpage. Think about why these sites might exist and how to check that the information is accurate. Learn about the meaning of age restrictions symbols on digital media and devices. Discuss why PEGI restrictions exist. Know where to turn for help if they see inappropriate content or have inappropriate contact from others.</p> <p>Animation 4.6 Decide what makes a good, animated film or cartoon and discuss favourite animations. Learn how animations are created by hand. Find out how 2Animate animations can be created in a similar way using technology. Learn about onion skinning in animation. Add backgrounds and sounds to animations. Share animation to the class blog.</p> <p>LOGO 4.5 Learn the structure of the language of 2Logo. Input simple instructions in 2Logo. Use 2Logo. Create letter shapes. Use the Repeat command in 2Logo. Create shapes. Use and build procedures in 2Logo.</p>	<p>Presenting – Google Slides 3:9 Create a page in a presentation. Add media to a presentation. Add shapes and lines to a presentation. Add animations into a presentation. Use the skills learnt to design and present an effective presentation.</p> <p>Making Music 4:9 Identify and discuss the main elements of music: Pulse, Rhythm, Tempo, Pitch, Texture. Understand and experiment with rhythm and tempo. Create a melodic phrase. Compose a piece of electronic music.</p>	<p>Coding 4:1 Review coding vocabulary and knowledge. Create a simple computer program. Begin to understand selection in computer programming. Understand how an IF/ELSE statement works. Understand how to use coordinates in computer programming. Understand the Repeat until command. Begin to understand selection in computer programming. Understand what a variable is in programming. Use a number variable. Create a playable game.</p> <p>Spreadsheets 3:3 Add and edit data in a table layout. Find out how spreadsheet programs can automatically create graphs from data. Introduce the 'more than', 'less than' and 'equals' tools. Introduce the 'spin' tool and show how it can be used to count through times tables. Introduce the Advanced mode of 2Calculate. Learn about describing cells using their addresses.</p>
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Topic outcomes	<p>Online Safety 5:2 Gain a greater understanding of the impact that sharing digital content can have. Review sources of support when using technology. Review responsibility to one another in their online behaviour. know how to maintain secure passwords. Understand the advantages, disadvantages, permissions, and purposes of altering an image digitally and the reasons for this. Be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. Learn about how to reference sources in their work. Search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information. Ensure reliability through using different methods of communication.</p> <p>3D Modelling 5:6 Be introduced to the 2Design and Make tool. Explore the effect of moving points when designing. Design a 3D model to fit certain criteria.</p>	<p>Word Processing – Google Docs 5:8 Know what a word processing tool is for. Add and edit images to a document. Know how to use word wrap with images and text. Change the look of text within a document. Add features to a document to enhance its look and usability. Use the sharing capabilities in Google docs. Use tables within Google Docs to present information. Introduce children to templates.</p> <p>Game Creator 5:5 Introduce the 2DIY 3D tool. Begin planning a game. Design the game environment. Design the game quest to make it a playable game. Finish and share the game. Self- and peer evaluate.</p>	<p>Coding 5:1 Review existing coding knowledge. Begin to be able to simplify code. Create a playable game. Understand what a simulation is. Program a simulation using 2Code. Know what decomposition and abstraction are in Computer Science. Take a real-life situation, decompose it and think about the level of abstraction. Use decomposition to make a plan of a real-life situation. Understand how to use friction in code. Begin to understand what a function is and how functions work in code. Understand what the different variable types are and how they are used differently. Understand how to create a string. begin to explore text variables when coding. Understand what concatenation is and how it works.</p> <p>Spreadsheets 5:3 Use formulae within a spreadsheet to convert measurements of length and distance. Use the count tool to answer hypotheses about common letters in use. Use a spreadsheet to model a real-life problem. Use formulae to calculate area and perimeter of shapes. Create formulae that use text variables. Use a spreadsheet to help plan a school cake sale.</p>

Computing - Year B

2022/2023 2024/2025	Autumn Happy, Healthy Me!	Spring Time Travel	Summer Here, There and Everywhere
Curlews Year 1 & 2	Online Safety 2:2 Grouping and Sorting 1:2 Pictograms 1:3	Questioning 2:4 Coding 1:7	Spreadsheets 1:8 Presenting 2:8 Coding 2:1
NC Links	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. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	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.	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 technology purposefully to create, organise, store, manipulate and retrieve digital content.
Topic outcomes	<p><u>Online Safety Unit 2:2</u> Know how to refine searches using the Search tool. Know how to share work electronically using the display boards. Use digital technology to share work on Purple Mash to communicate and connect with others locally. Have some knowledge and understanding about sharing more globally on the Internet. Introduce Email as a communication tool using 2Respond simulations. Understand how we talk to others when they are not there in front of us. Open and send simple online communications in the form of email. Understand that information put online leaves a digital footprint or trail. Begin to think critically about the information they leave online. Identify the steps that can be taken to keep personal data and hardware secure.</p> <p><u>Grouping and Sorting 1:2</u> Sort items using a range of criteria. Sort items on the computer using the 'Grouping' activities in Purple Mash.</p> <p><u>Pictograms 1:3</u> Understand that data can be represented in picture format. Contribute to a class pictogram. Use a pictogram to record the results of an experiment.</p>	<p><u>Questioning 2:4</u> Show that the information provided on pictograms is of limited use beyond answering simple questions. Use yes/no questions to separate information. Construct a binary tree to separate different items. Use 2Question (a binary tree) to answer questions. Use a database to answer more complex search questions. Use the Search tool to find information.</p> <p><u>Coding 1:7</u> Use code to make a computer program. Understand what object and actions are. Understand what an event is. Use an event to control an object. Begin to understand how code executes when a program is run. Understand what backgrounds and objects are. Plan and make a computer program.</p>	<p><u>Spreadsheets 1:8</u> Know what a spreadsheet program looks like. Locate 2Calculate in Purple Mash. Enter data in spreadsheet cells. Use 2Calculate image tools to add clipart to cells. Use 2Calculate to control tools: lock, move cell, speak and count.</p> <p><u>Presenting 2:8</u> Explore how a story can be presented in different ways. Make a quiz about a story or class topic. Make a fact file on a non-fiction topic. Make a presentation</p> <p><u>Coding 2:1</u> Understand what an algorithm is. Create a computer program using an algorithm. Create a program using a given design. Understand the collision detection event. Understand that algorithms follow a sequence. Design an algorithm that follows a timed sequence. Understand that different objects have different properties. Understand what different events do in code. Create a program using a given design. Know what debugging means. Understand the need to test and debug a program repeatedly.</p>
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Topic outcomes	<p><u>Online Safety 4:2</u> Understand how children can protect themselves from online identity theft. Understand that information put online leaves a digital footprint or trail and that this can aid identity theft. Identify the risks and benefits of installing software including apps. Understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism. Identify the positive and negative influences of technology on health and the environment. Understand the importance of balancing game and screen time with other parts of their lives. Identify appropriate behaviour when participating or contributing to collaborative online projects for learning.</p> <p><u>Branching Databases 3:6</u> Sort objects using just 'yes' or 'no' questions. Complete a branching database using 2Question. Create a branching database of the children's choice.</p> <p><u>Coding 3:1</u> Review previous coding knowledge. Understand how to use the repeat command. Use coding knowledge to create a range of programs.</p>	<p><u>Email 3:5</u> Think about different methods of communication. Open and respond to an email using an address book. Learn how to use email safely. Add an attachment to an email. Explore a simulated email scenario.</p> <p><u>Graphing 3:8</u> Introduce 2Graph and use 2Graph in an Investigation.</p>	<p><u>Touch Typing 3:4</u> Introduce typing terminology. Understand the correct way to sit at the keyboard. Learn how to use the home, top and bottom row keys. Practise typing with the left and right hand.</p> <p><u>Artificial Intelligence 4:10</u> Understand the basic concept of artificial intelligence. Identify real-life examples of artificial intelligence. Recognise the impact of artificial intelligence in daily life. Explore how artificial intelligence can assist and benefit us in various aspects of daily life. Understand the potential applications and impact of AI in the future. Encourage critical thinking and creativity when thinking about the future of AI. Understand how artificial intelligence is being used to create music and art. Use artificial intelligence to create music and art.</p>
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Topic outcomes	<p><u>Online Safety 6:2</u> Identify benefits and risks of mobile devices broadcasting the location of the user/device, e.g. apps accessing location. Identify secure sites by looking for privacy seals of approval, e.g. https, padlock icon. Identify the benefits and risks of giving personal information and device access to different software. Have a clear idea of appropriate online behaviour and how this can protect themselves and others from possible online dangers, bullying and inappropriate behaviour.</p> <p><u>Spreadsheets – Google Sheets 6:9</u> Know what a spreadsheet looks like. Navigate and enter data into cells. Introduce some basic data formulae in Sheets. Demonstrate how spreadsheets can make complex data clearer by manipulating the way it is presented. Use formulae for percentages.</p> <p><u>Text Adventures 6:5</u> Find out what a text-based adventure game is and explore an example made in 2Create a Story. Use 2Connect to plan a 'Choose your own Adventure' type story. Use 2Connect plans for a story adventure.</p>	<p><u>Databases 5:4</u> Learn how to search for information in a database. Contribute to a class database. Create a database around a chosen topic.</p> <p><u>Quizzing 6:7</u> Create a picture-based quiz for young children. Learn how to use the question types within 2Quiz. Explore the grammar quizzes. Make a quiz that requires the player to search a database.</p>	<p><u>Blogging 6:4</u> Identify the purpose of writing a blog. Identify the features of successful blog writing. Plan the theme and content for a blog. Understand how to write a blog and a blog post. Consider the effect upon the audience of changing the visual properties of the blog. Understand how to contribute to an existing blog. Understand the importance of commenting on blogs. Peer-assess blogs against the agreed success criteria. Understand how and why blog posts and comments are approved by the teacher.</p> <p><u>Networks 6:6</u> Discover what the children know about the Internet. Find out what a LAN and WAN are. Find out how we access the internet in school. Research and find out about the age of the internet. Think about what the future might hold.</p>