Long Term Curriculum Overview 2025-2026 — Subject: Computing

Dream big. Love God. Live well.
'I can do all things through Him who strengthens me.' Philippians 4:13

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Children in the Early Years Foundation Stage will begin to investigate technological devices by exploration. With support from adults, they will use different technology for a purpose and begin to understand the functions of different devices.					
Year 1	**Online Safety (Unit: 1.1)** Know how to log in safely. Learn how to find saved work. Learn how to open, save and print. Understand the importance of logging out. **Grouping and sorting (Unit 1.2)** Sort items using a range of criteria. Sort items on the computer.	**Pictograms (Unit 1.3)** Understand that data can be represented in picture format. Contribute to a class pictogram. Use a pictogram to record the results of an experiment. **Lego builders (Unit 1.4)** Compare the effects of adhering strictly to instructions to completing tasks without complete instructions. Follow and create simple instructions on the computer. Consider how the order of instructions affects the result.	**Maze Explorers (Unit 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. **Technology outside school (Unit 1.9)** Walk around the local community and find examples of where technology is used. Record examples of technology outside school.	**Animated story books (unit 1.6)** 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.	**Coding (Unit 1.7)** Understand what instructions are and predict what might happen when they are followed. 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.	**Coding (Unit 1.7)** Understand what instructions are and predict what might happen when they are followed. 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.
Year 2	**Online Safety (Unit 2.2)** Know how to refine searches using the Search tool. Use digital technology to share work, 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. Understand how we should talk to others in an online situation. Open and send simple online communications in the form of email. Understand that information put online leaves a digital footprint or trail. Identify the steps that can be taken to keep personal data and	**Questioning (Unit 2.4)** Learn about data handling tools that can give more information than pictograms. Use yes/no questions to separate information. Construct a binary tree to identify items. Use a binary tree database to answer questions. Use a database to answer more complex search questions. Use the Search tool to find information.	**Creating pictures (Unit 2.6)** Learn the functions of 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 such as Seurat. 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 eCollege. **Effective searching (Unit 2.5)** Understand the terminology associated with searching. Gain a better understanding of	**Presenting ideas (Unit 2.8)** 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 to the class.	**Spreadsheets (Unit 2.3)** Use spreadsheet to lock, move cell, speak and count to make a counting machine. Learn how to copy and paste. Use the totalling tools. Use spreadsheet for money calculations. Use spreadsheet to check calculations. Use spreadsheet to collect data and produce a graph.	**Coding (Unit 2.1)** 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. Understand the function of buttons in a program. Understand and debug simple

	hardware secure. **Making Music (Unit 2.7)** Make music digitally. Explore, edit and combine sounds. Edit and refine composed music. Think about how music can be used to express feelings and create tunes which depict feelings. Upload a sound from a bank of sounds. Record and upload environmental sounds. Use these sounds to create tunes.		searching on the Internet. Create a leaflet to help someone search for information on the Internet.			programs.
Year 3	**Online Safety (Unit 3.2)** Know what makes a safe password. Learn methods for keeping passwords safe. Understand how the Internet can be used in effective communication. Understand how a blog can be used to communicate with a wider audience. Consider the truth of the content of websites. Learn about the meaning of age restrictions symbols on digital media and devices. **Touch typing (Unit 3.4)** 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.	**Branching databases (Unit 3.6)** Sort objects using just 'yes' or 'no' questions. Complete a branching database. Create a branching database of the children's choice.	**Email (Unit 3.5)** 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.	**Simulations (Unit 3.7)** Consider what simulations are. Explore a simulation. Analyse and evaluate a simulation. **Graphing (Unit 3.8)** Enter data into a graph and answer questions. Solve an investigation and present the results in graphic form.	**Spreadsheets (Unit 3.3)** Use the symbols more than, less than and equal to, to compare values. Use Spreadsheet to collect data and produce a variety of graphs. Use the advanced mode of Spreadsheet to learn about cell references.	**Coding (Unit 3.1)** Understand what a flowchart is and how flowcharts are used in computer programming. Understand that there are different types of timers and select the right type for purpose. Understand how to use the repeat command. Understand the importance of nesting. Design and create an interactive scene.
Year 4	**Online Safety (Unit 4.2)** 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.	**Writing for different audiences (Unit 4.4)** To explore how font size and style can affect the impact of a text. To use a simulated scenario to produce a news report Use information to write a newspaper report Use a simulated scenario to write for a community campaign.	**Logo (Unit 4.5)** Learn the structure of the coding language of Logo. Input simple instructions in Logo. Use Logo to create letter shapes. Use the Repeat function in Logo to create shapes. Use and build procedures in Logo.	**Animation (Unit 4.6)** Discuss what makes a good animated film or cartoon. Learn how animations are created by hand. Find out how animation can be created in a similar way using the computer. Learn about onion skinning in animation. Add backgrounds and sounds to	**Artificial Intelligence (Unit 4.10)** Understand what Artificial Intelligence is. Learn how Artificial Intelligence can help us. Understand the future of Artificial Intelligence. See Artificial Intelligence in action.	**Coding (Unit 4.1)** Begin to understand selection in computer programming. Understand how an IF statement works. Understand how to use co-ordinates in computer programming. Understand the 'repeat until' command. Understand how an IF/ELSE

	Understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism. Identify appropriate behaviour when participating or contributing to collaborative online projects for learning. 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. **Hardware investigators (Unit 4.8)** Understand the different parts that make up a computer. Recall the different parts that make up a computer.			animations. Be introduced to 'stop motion' animation. Share animation on the class display board and by blogging.		statement works. Understand what a variable is in programming. Use a number variable. Create a playable game.
Year 5	**Online Safety (Unit 5.2)** Gain a greater understanding of the impact that sharing digital content can have. Review sources of support when using technology and children's 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. **Concept maps (Unit 5.7)** Understand the need for visual	**Databases (Unit 5.4)** Learn how to search for information in a database. Contribute to a class database. Create a database around a chosen topic.	**Game Creator (Unit 5.5)** Plan a game. Design and create the game environment. Design and create the game quest. Finish and share the game. Self and peer evaluate.	**3D Modeling (Unit 5.6)** Be introduced to the skills of computer aided design. Explore the effect of moving points when designing. Design a 3D Model to fit certain criteria. Refine and print a model.	**Spreadsheets (Unit 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.	**Coding (Unit 5.1)** Begin to simplify code. Create a playable game. Understand what a simulation is. Program a simulation. Know what decomposition and abstraction are in computer science. Take a real-life situation, decompose it and think about the level of abstraction. Understand how to use friction in code. Begin to understand what a function is and how functions work in code. Understand what the different variables types are and how they are used differently. Understand how to create a string. Understand what concatenation is and how it works.

	representation when generating and discussing complex ideas. Understand the uses of a 'concept map'. Understand and use the correct vocabulary when creating a concept map. Create a concept map. Understand how a concept map can be used to retell stories and information. Create a collaborative concept map and present this to an audience.					
Year 6	**Online Safety (Unit 6.2)** Identify benefits and risks of mobile devices broadcasting the location of the user/device. Identify secure sites by looking for privacy seals of approval. Identify the benefits and risks of giving personal information. Review the meaning of a digital footprint. Have a clear idea of appropriate online behaviour. Begin to understand how information online can persist. Understand the importance of balancing game and screen time with other parts of their lives. Identify the positive and negative influences of technology on health and the environment. **Networks (Unit 6.6)** Learn about what the Internet consists of. Find out what a LAN and a WAN are. Find out how the Internet is accessed in school. Research and find out about the age of the Internet. Think about what the future might hold.	**Blogging (Unit 6.4)** Identify the purpose of writing a blog. Identify the features of a successful blog. 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 how and why blog posts are approved by the teacher. Understand the importance of commenting on blogs.	**Networks (Unit 6.6)** Learn about what the Internet consists of. Find out what a LAN and a WAN are. Find out how the Internet is accessed in school. Research and find out about the age of the Internet. Think about what the future might hold.	**Text Adventures (Unit 6.5)** Find out what a text adventure is. Plan a story adventure. Make a story-based adventure. Introduce an alternative model for a text adventure which has a less sequential narrative. Use written plans to code a map based adventure.	**Spreadsheets (Unit 6.3)** Use a spreadsheet to investigate the probability of the results of throwing many dice. Use a spreadsheet to calculate the discount and final prices in a sale. Use a spreadsheet to plan how to spend pocket money and the effect of saving money. Use a spreadsheet to plan a school charity day to maximise the money donated to charity.	**Coding (Unit 6.1)** Design a playable game with a timer and a score. Plan and use selection and variables. Understand how the launch command works. Use functions and understand why they are useful. Understand how functions are created and called. Use flowcharts to create and debug code. Create a simulation of a room in which devices can be controlled. Understand how user input can be used in a program. Understand how code can be used to make a text-adventure game.