# WHOLE SCHOOL STICKY KNOWLEDGE OVERVIEW - COMPUTING

## EYFS

| Digital Literacy | Computer Science | Information Technology |
|---|---|---|
| Coming soon | Coming soon | Coming soon |

## Y1

| Digital Literacy | Computer Science | Information Technology |
|---|---|---|
| 1.1 **Online Safety**<br>-To log in and out safely.<br>-To learn how to find saved work in the Online Work area.<br>-To learn how to open, save and print.<br><br>1.9 **Technology outside**<br>-Be aware of technology outside school and give examples | 1.2 **Grouping and sorting**<br>- sort items using a range of criteria<br>1.4 Lego builders<br>- to follow and create simple instructions on the computer<br>-Consider how the order of instructions affect the result<br><br>1.5 **Maze explorers**<br>-to understand how direction keys work<br>- create and debug a set of instructions (algorithms)<br>- change and extend an algorithm list<br><br>1.7 **Coding**<br>- use code to plan and make a computer program<br>-understand an event and use to control an object<br>- understand backgrounds and objects. | 1.2 **Pictograms**<br>-undertsand that data can be represented in pictures<br>-use a pictogram<br><br>1.6 **Animated storybooks**<br>-add animation to a story<br>-add sound to a story<br>-add backgrounds<br>-copy and paste pages.<br><br>1.8 **Spreadsheets**<br>-enter data into cells<br>-add clip art to cells<br>-begin to use control tools: lock, move cell and count |

Y2

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| **2.2 Online Safety**<br>-To know how to use a search tool.<br>-share work safely within PM<br>-To open and send simple emails<br>- understand respectful online interactions<br>- Identify how to keep personal data safe<br><br>**2.5 Effective searching**<br>- search the internet safely with precision | **2.1 Coding**<br>-create computer program using an algorithm<br>-understand the collision detection event.<br>-design an algorithm that follows a timed sequence<br>- Understand what different events do.<br>- understand and debug simple programs. | **2.3 Spreadsheets**<br>- to use control tools: lock, move cell and totalling and equals tools<br>-can copy and paste<br> 2.4 Questioning<br>-use yes/no questions to separate information<br>- use a database to answer more complex search questions<br>- to use a binary tree to answer questions.<br><br>**2.6 Making music**<br>-explore edit and combine sounds<br>- record and upload sounds<br><br>**2.8 Presenting ideas**<br>- create a quiz |

Y3

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| 3.2 Online Safety<br>-Understanding how to create and keep a safe password<br>-understand how the internet can be used to communicate (blogs)<br>- Consider the reliability of website content<br>- To learn about the meaning of age restrictions on digital media and devices (PEGI)<br><br>**3.5 Email**<br>- To open and respond using an address book<br>-use email safely including in a simulated scenario<br>-add an attachment | 3.1 Coding<br>Understand flow charts and how they are used in computer programming.<br>-understand and use different types of timers.<br>- understand how to use the repeat command.<br>-understand the importance of nesting. | **3.3 Spreadsheets**<br>- use advanced mode and cell references<br>-collect data and produce graphs<br>**3.4 Touch typing**<br>-use the home, top and bottom row keys<br>**3.6 Branching** databases<br>- use yes or no questions to sort objects<br>-create a branching database with support<br>**3.7 Simulation**<br>- explore and evaluate a simulation<br>**3.8 Graphing**<br>- enter data into a graph and answer questions<br>**3.9 Presenting with PPT**<br>-add slides, media, shapes and lines<br>- to format text |

Y4

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| **4.2 Online Safety**<br>-Know how to protect yourself from online identity theft<br>-Understand that digital footprints can led to identity theft<br>- Understand the term 'plagiarism' and its consequences.<br>-To understand the importance of balancing screen time with other parts of their life.<br>-To identify respectful behaviour when working collaboratively online.<br><br>**4.7 Effective searching**<br>-locate information on the search results page.<br>- Search effectively to find out information<br>-assess reliability of information source. | **4.1 Coding**<br>-understand how an IF/ELSE statement works.<br>-understand the 'repat until' command.<br>- use a number variable.<br><br>**4.5 Logo**<br>-understand the language and structure of Logo.<br>-input simple instructions<br>- use the repat function in Logo.<br><br>**4.8 Hardware investigators**<br>-recall the different parts that make up a computer | **4.3 Spreadsheets**<br>-to format cells as currency, percentage, fractions and decimals (to different places)<br>-to add formula to a cell for calculations<br>- use a spreadsheet to model a real-life situation<br><br>**4.6 Animation**<br>- add backgrounds and sounds to animations<br>- add 'stop motion'<br>- to share animation on a display board/blogging.<br><br>**4.9 Making Music**<br>- to electronically compose a piece of music |

Y5

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| **5.2 Online Safety**<br>-understanding the impact of sharing digital content<br>- review sources of support when using technology and children's responsibility to one another in their online behaviour<br>- Be aware of appropriate and inappropriate text, photos and videos and the impact of sharing these online (including altering digital images)<br>-understand the importance of referencing sources. | **5.1 Coding**<br>- understand and program simulation<br>- begin to understand decomposition and abstraction.<br>- understand what functions are in code<br>-understand different variable types and their uses.<br>- begin to use concatenation<br>- be able to create a string.<br><br>**5.5 Game creator**<br>-to design, create and evaluate a game. | **5.4 Databases**<br>- learn how to search for information on a database<br>- create a database with support<br><br>**5.6 Modelling**<br>-explore the effect of moving points when designing<br><br>**5.8 Google Docs**<br>- to add and edit images<br>- know how to use word wrap with images and text<br>- use the sharing capabilities in Google Docs<br>-use tables to present information<br>- use templates within Google Docs. |

Y6

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| **6.2 Online Safety**<br>-identify benefits and risks of mobile devices broadcasting their location<br>- identify secure sites by looking for privacy seals of approval<br>-apply the understanding of the importance on balancing screen time with other parts of their lives.<br>- routinely apply the principles of the smart rules. | **6.1 Coding**<br>-plan and use selection and variables<br>- understand how the launch command works<br>- understand how functions are created and called.<br>-use flowcharts to create and debug code<br>-understand how devices can be controlled within a simulation<br><br>**6.6 Networks**<br>- learn about what the internet consists of<br>-find out what an LAN and WAN is<br><br>**6.8 Binary**<br>- recognise that digital systems represent all types of data using number codes that are patterns of 1s and 0s (called binary digits) | **6.3 Spreadsheets**<br>- use a spreadsheet for real life purposes<br><br>**6.4 Blogging**<br>-plan the theme and content for a blog<br>-understand how to write a blog on a blog post<br><br>**6.7 Quizzing**<br>- create a quiz for an audience<br><br>**6.9 Spreadsheets with google sheets**<br>- use formulae for percentages, averages, max/min<br>- use a spreadsheet to model a situation<br>- create a variety of graphs and sheets |