# Knowledge, Skills and Understanding Curriculum for Computing

Our school curriculum is bespoke and is designed to develop curious, kind and courageous pupils. Where possible computing learning links with the IPC unit for the term/half term and cross-curricular links are made to a variety of other subjects. Units have been chosen from the IPC to ensure a broad and balanced curriculum which covers the National Curriculum but goes beyond this so that the content is pertinent to their lives, our local context and international issues. Providing opportunities for children to understand and use a wide range of computing equipment is fundamental to our computing curriculum.

In EYFS and Key Stage One children begin by developing an understanding of technology around them, both at home and at school. They build on this understanding through exploring a wide variety of computing equipment, including iPads, beebots, blue-bots, OSMO, interactive whiteboards, SMART table and Purple Mash. In Key Stage Two children apply and deepen their knowledge, skills and understanding using chromebooks, pro-bots and Sphero robots. We are constantly striving to update the equipment used to teach the curriculum in order to reflect technological advancements and best equip the children to be ready for life in the 21st Century.

Blue - Using Computers, Gold - Coding, Pink – Digital Literacy, Green – Online Safety

<table>
<tr><th></th><th>Autumn</th><th>Spring</th><th>Summer</th></tr>
<tr><td>YR</td><td colspan="3"><u>EYFS Framework Links</u><br>Playing and Exploring<br>Finding out and exploring: showing curiosity about object, events and people; showing particular interests<br>Playing with what they know: representing their experiences in play<br>Being willing to ‘have a go’: showing a ‘can do’ attitude; taking a risk, engaging in new experiences, and learning by trial and error<br><br>Active Learning<br>Being involved and concentrating: maintaining focus on their activity for a period of time; paying attention to details<br>Keeping on trying: persisting with activity when challenges occur; showing a belief that more effort or a different approach will pay off; bouncing back after difficulties<br>Enjoying achieving what they set out to do: showing satisfaction in meeting their own goals<br><br>Creating and Thinking Critically<br>Having their own ideas: finding ways to solve problems; finding new ways to do things<br>Making Links: Making links and noticing patterns in their experience; making predictions; testing their ideas, developing ideas of grouping, sequences, cause and effect.<br>Choosing ways to do things: planning, making decisions about how to approach a task, solve a problem and reach a goal; changing strategy as needed</td></tr>
<tr><td></td><td rowspan="2"><u>Autumn 1</u><br>Be able to show an interest in and explore technology through play.<br><br>Know how to operate simple technological equipment (iPads, Smartboard)</td><td><u>Spring 1</u><br>Be able to recognise technology for different purposes (e.g. Home: Alexa, Sonos, Smart TV).<br><br>Be able to explore technology in the locality (e.g. pedestrian crossing, school/home intercom, CCTV)</td><td><u>Summer 1</u><br>Know that a range of technology is used in places such as homes and schools.<br><br>Know that information can be retrieved from computers (iPads, Smart Table).<br><br>Be able to independently select and use technology to interact with age appropriate software (iPads, Beebots).</td></tr>
<tr><td>Online safety day – 11th Feb 2025<br>https://www.saferinternetday.org/</td><td><u>Online Safety</u><br>https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/<br>Episode 1 – Jessie and Friends (I know who to speak to if I have any worries about what I have seen online)</td></tr>
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| | **Autumn 2**<br>**Online Safety**<br>Smartie the Penguin (https://www.childnet.com/resources/smartie-the-penguin - see for lesson plan and resources)<br>Begin to develop an understanding of how to stay safe online | | **Spring 2**<br>Know that information can be retrieved from computers (smart board, iPads).<br><br>Know how to operate hardware such as Beebots, iPads with headphones, Smart Board, walkie talkies, recordable whiteboards.<br><br>Be able to log on to an iPad using the 4-digit code | | **Summer 2**<br>Be able to log on to Purple Mash using their own username and password<br><br>Be able to access a 2do on Purple Mash | |
| | Be able to use the iPads to create a video (Naughty Bus) | | Be able to create an animal picture on Purple Mash (EYFS paint project – Big Cats) | | Be able to create a dinosaur picture on Purple Mash | |
| | **KS1 National Curriculum**<br>• Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions<br>• Create and debug simple programs<br>• Use logical reasoning to predict the behaviour of simple programs<br>• Use technology purposefully to create, organise, store, manipulate and retrieve digital content<br>• Recognise common uses of information technology beyond the school<br>• 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<br><br>*Key Vocabulary: computer, technology, online, internet, online safety, iPad, login, logout, username, password, personal, private, app, icon, picture, text, type, keyboard, save, print, open, new, search, ebook, colour, font, size, animation, sound, image, record, background, character, copy, paste, keys, direction, forward, backward, left, right, instruction, debug, code, coding, block, algorithm, program, file, click, input, event, object, collision, data, pictogram* | | | | | |
| **Y1** | **Autumn 1**<br>**Computers**<br>1. Recognise common uses of technology at home, school and beyond school.<br>e.g At home (washing machine, oven, Alexa, Tablet/Phone | **Autumn 2**<br>**Online Safety and Exploring Purple Mash. (Lessons 1-3)**<br>1. **(PM1)** To log in safely and save their work.<br>2. **(PM2)** To learn how to find saved work in the online work area and see teacher comments. | **Spring 1**<br>**Animated Story Books PM – lessons 1-5 link to English.)**<br>1. **(PM1)** To explore the tools of 2create to start a story. To save the story effectively.<br>2. **(PM2)** To retrieve the saved story and add animation to a story. | **Spring 2**<br>**Coding**<br>**Maze explorers (PM lessons 1-4)**<br>1. **(PM1)** To understand the functionality of the basic direction keys in challenges 1, 2 3 and 4. | **Summer 1**<br>**Coding**<br>**Osmo**<br>1. To set up, use and pack away OSMO safely and respectfully.<br>-To create an OSMO log in and Avatar. (See guide to OSMO) | **Summer 2**<br>**Pictograms.** (Link to Maths/Science)<br>**Purple Mash lessons 1-3.**<br>1. **(PM1)** To understand that data can be represented in data format. |

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| | | 3. **(PM3)** To know how to search PM in order to find resources.<br>4. **(PM3)** To start to add pictures and text to work (using keyboard to type name)<br>To understand the importance of logging out when they have finished. | 3. **(PM3)** To add sound to a story the children have created including voice recording and music.<br>4. **(PM4 &5)** To work on a more complex story including adding backgrounds, copying and pasting pages.<br>To use additional features to enhance their stories (e.g animations).<br><br>**BIG PICTURE:** To introduce ebooks and to create an online story. | 2. **(PM2)** To understand how to create and debug a set of instructions (algorithm).<br>3. **(PM3) T**o use the additional direction keys as part of their algorithm.To understand how to change and extend the algorithm list.<br>4. **(PM4)** To provide an opportunity for the children to set challenges for each other. | 2. Use the coding blocks to create a few lines of code and to begin to use logical reasoning to predict where Awbie will end up and how many strawberries he will eat.<br><br>3. Explain that a bug is a problem with the computer's program. | 2. **(PM2)** To contribute to a class pictogram<br>**3. (PM3)** To use a pictogram to record the results of an experiment.<br><br>**BIG PICTURE: To create a pictogram presenting data in maths/science.** |
| | **Online Safety Episode 2 Jessie and Friends**<br>2.https://www.thinkuknow.co.uk/professionals/resources/jessie-and-friends/<br>-To know what to do and where to go for help and support over any concerns.<br>Explain what it means to stay safe online (with support). | | | | | **Online Safety**<br>4. Smartie the Penguin (https://www.childnet.com/resources/smartie-the-penguin - see for lesson plan and resources)<br>Begin to develop an understanding of how to stay safe online |
| | **Coding – beebot**<br>3/4. To program a beebot to move forwards, backwards and change direction. | | **Online safety day – 11th Feb 2025**<br>5.https://www.saferinternetday.org/ | | | |
| | **KS1 National Curriculum**<br>• Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions | | | | | |

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<li>Create and debug simple programs</li>
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<li>Recognise common uses of information technology beyond the school</li>
<li>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</li>
</ul>
Key Vocabulary: instruction, debug, code, coding, lines of code, block, algorithm, program, predict, action, login, logout, private, personal, username, password, search, text, type, share, communicate, internet, online, email, open, send, save, digital, information, background, character, image, photograph, camera, record, voice, sound, effect, stop motion animation, turtle, object, action, event, input, output, command, repeat, timer, picture, paint, art, impressionist, pointillism, style, repeating pattern, surrealism, mind map, quiz, ebook, factfile, digital content, clipart, table, collect, organise, present, support, concern, technology, spreadsheet, row, column, edit, copy, paste tools
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<tr><td>Y2</td><td rowspan="2"><u>Autumn 1</u><br><u>OSMO</u><br>To set up, use and pack away OSMO safely and respectfully. (Ongoing)<br><br>1. To explain what an algorithm is.<br>2. To understand that programs (OSMO) work by following precise and unambiguous instructions<br>3 & 4. Use the coding blocks to create a few lines of code and use logical reasoning to predict where Awbie will end up clearly relating each action</td><td><u>Autumn 2</u><br><u>Online Safety (Purple Mash lessons 1 & 3)</u><br>1. (PM1) To know how to refine searches using the search tool.<br>To know how to share work electronically using the PM display boards.<br>2. (PM3) To understand that information put online leaves a digital footprint or trail.</td><td><u>Spring 1</u><br><u>Online safety day – 11th Feb 2025</u><br>5.https://www.saferinternetday.org/</td><td><u>Spring 2</u><br><u>Spreadsheets (Purple Mash lessons 1-4)</u><br><u>Link to maths or science</u><br>1. (PM1) To review what rows and columns are.<br>To add images to a spreadsheet.<br>2. (PM2) To explain and use copy and pasting.<br>To use the totalling tools.<br>3. (PM3) To explore the capabilities of a spreadsheet in adding up coins to match the prices of objects<br>4. (PM4) To use the data to manually create a block graph.</td><td><u>Summer 1</u><br><u>Presenting Ideas (PM lessons 1-4)</u><br>1. (PM1) To explore how a story can be presented in different ways.<br>2. Choose to make a quiz (PM2), fact file (PM3) or a presentation (PM4) about a story you've been looking at.</td><td rowspan="2"><u>Summer 2</u><br><u>Creating pictures – PM lessons 1-5.</u><br>Link to Art<br>1. (PM1) To be introduced to 2Paint a Picture.<br>To look at the impressionist style of art (Monet, Degas, Renoir)<br>2. (PM2) To recreate pointillist art and look at the work of pointillist artists such as Seurat.<br>3. (PM3) To look at the work of Piet Mondrian and recreate it using the Lines template.<br>4. (PM4) To look at the work of William Morris and recreate it using the patterns template.<br>5. (PM5) To explore surrealism and ECollage.</td></tr>
<tr><td></td><td><u>Stop Motion animation (Link to English and Art)</u></td><td><u>Coding – 2Code (Purple Mash lessons 1-5)</u></td><td><u>Effective Searching</u></td><td><u>Online Safety</u></td></tr>
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| | to each part of their algorithm.<br><br>**BIG PICTURE:**<br>Plan and put together an OSMO algorithm<br>  | 3. Create a background and characters to retell a story.<br>4. Set up a recording space to take photos (See hints and tips doc)<br>5. Use the SM app to take a sequence of pictures retelling the story.<br>6. Use the SM app to add voice and sound effects.<br><br>**BIG PICTURE:** To make a stop motion animation about the brain. | 1. **(PM1)** To compare the turtle and character objects.<br>2. **(PM2 & 3)** To use the button object.<br>To understand how to use the repeat command.<br>To understand how to use the timer command.<br>3. **(PM4&5)** To debug simple programs.<br>4.**(PM6)** To create programs using different kinds of objects whose behaviours are limited to specific actions. (e.g a character performing an action or changing a costume) | **Purple Mash lessons 1-2.**<br>3. **(PM1**) To understand the terminology associated with searching.<br>4. **(PM2**) To gain a better understanding of searching on the internet. | **Episode 3 Jessie and Friends**<br>5.https://www.thinkuknow.co.uk/professionals/resources/jessie-and-friends/<br>I can start to develop strategies to manage concerns about content on the internet or other online technologies and know where to seek support and help. | |
| | **KS2 National Curriculum:**<br>• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts<br>• Use sequence, selection and repetition in programs; work with variables and various forms of input and output<br>• Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs<br>• Understand computer networks including the Internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration<br>• Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content<br>• 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<br>• Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact<br>Key vocabulary: online safety, e-safety, username, password, confidential, personal, internet, blog, website, true, false, digital media, age restriction, device, content, simulation, probot, technology, charge, battery, coding, code, object, action, output, control, event, debug, debugging, bug, fix, algorithm, program, repetition, logical reasoning, prediction, stop motion animation, background, character, photograph, record, voice, sound, effect, app, email, communication, address, attachment, if command, timer, variable, design, X and Y properties, save, edit, open, new, positive digital footprint, Google, cyberbullying, digital literacy | | | | | |

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| **Y3** | **Autumn 1**<br><br>**<u>Online Safety PM lessons 1-3</u>**<br>1. **(PM1)** Understand what makes a safe password.<br>Understand that for most people the internet is an integral part of life and has many benefits.<br>2. **(PM2 & 3)** To begin to think about why fake information/websites might exist and how to check if information is accurate.<br>To learn about the meaning of age restrictions symbols on digital media and devices. To discuss why PEGI restrictions exist.<br>To know where to turn for help if they see inappropriate content or have inappropriate contact from others. | **<u>Autumn 2</u>**<br>**<u>Coding: Probots</u>**<br>*Use technology safely, respectfully and responsibly by unpacking, packing away and ensuring the Probots go on charge ready for next class.*<br><br>1. Being to use coding vocabulary relating to Object, Action, Output, Control and Event.<br>2. To understand what debugging means.<br>3. Design, write and begin to debug simple algorithms. Write programs using repetition.<br>4. Use logical reasoning to explain how simple algorithms work. | **<u>Spring 1</u>**<br>**Online safety day – 11th Feb 2025**<br>6.<u>https://www.saferinternetday.org/</u> | **<u>Spring 2</u>**<br>**<u>Email: 2Email PM lessons 1-6</u>**<br>*Using the 2Email settings class teacher to set the level of use they want to give pupils e.g emailing other pupils, teachers and whether emails need to be approved by an adult*<br><br>1. **(PM1)**To think about different methods of communication.<br>2. **(PM2)**To open and respond to an email.<br>3. **(PM3)** To write an email to someone using an address book.<br>4 **(PM4)**To learn how to use email safely.<br>5. **(PM5)** To add an attachment to an email.<br>6. **(PM6)** To explore a simulated email scenario. | **<u>Summer 1</u>**<br>**<u>Coding – 2Code PM lessons 1-6)</u>**<br>1.**(PM1)** Use 2Chart to represent a sequential program design.<br>2. **(PM2)** Use the design to write the code for a program. To combine a timer in a program with selection.<br>3. **(PM3)** To create a program with an object that repeats actions indefinitely.<br>4. **(PM4)** To understand the importance of nesting.<br>5. **(PM 5&6)** To explain what debugging means To understand the importance of saving their work after writing each section of the program. | **<u>Summer 2</u>**<br>**<u>Online safety – Google Internet Legends Planning Be Internet Sharp: Think Before You Share (p 4- 11 & 52-55)</u>**<br>1. Understand what having a positive digital footprint means.<br>2. Know some ways in which they can build a positive digital footprint. |

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| | **Simulations (PM lessons 1-3)**<br>3. **(PM1)** Consider what simulations are.<br>4. **(PM2 & 3)** Explore a simulation<br>Analyse and evaluate a simulation. | | **Animation: Stop Motion App (Link to Science or English)**<br>1. To know about the origins of animation (Show children the images of Sally Gardner, the horse Edward Muybridge photographed and then animated into moving images.)<br>2.To work in groups to create a 6-panel storyboard to be animated.<br>3.Create a background and characters to retell a story. Set up a recording space to take photos (See hints and tips doc)<br>4.Use the SM app to take a sequence of pictures retelling the story using small movements between each shot.<br>5. Use the SM app to add voice and sound effects – need to upgrade the app | | | **Digital Literacy**<br>3 &4. Use Toontastic to create video/book (Link with English**)** to tell a story Create a sequence of images to create a short animation/film. Check app is updated and on all devices. |
| | **KS2 National Curriculum:**<br>• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts<br>• Use sequence, selection and repetition in programs; work with variables and various forms of input and output<br>• Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs<br>• Understand computer networks including the Internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration<br>• Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content<br>• 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 | | | | | |

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<tr><td>Y4</td><td><u>Autumn 1</u><br><u>Using Computers (1 lesson)</u><br>1. Using technology safely and respectfully. (Getting out, using and putting away chromebooks) Logging onto chromebooks Printing from Chromebooks.<br>2. Word document skills.<br><br><u>Keyboard Skills: (Year 3 PM Touch Typing lessons 1-4)</u><br>3 & 4. There are a range of activities to pick from and each lesson has a powerpoint feel free to pick and choose. To introduce typing terminology. Understand the correct way to sit at the keyboard.</td><td><u>Autumn 2</u><br><u>Coding: Logo 2Go (PM lessons 1-3</u><br>1. (PM1 & 2)To learn the language of Logo.<br>To input simple instructions in Logo.<br>Using 2Logo to create letter shapes.<br>2. (PM3) Use Repeat function in Logo to create shapes.<br>To use and build procedures in Logo.<br><br>BIG PICTURE:<br>Create a Christmas Card<br>  <br><br><u>Online Safety (PM lessons 1-4)</u><br>3. (PM1) To understand how children can protect themselves from online identity theft.</td><td><u>Spring 1</u><br><u>Artificial Intelligence (PM 1-4)</u><br>1. (PM1) To understand the basic concept of Artificial intelligence.<br>2. (PM2) To explore how artificial intelligence can assist and benefit us in various aspects of daily life.<br>3. (PM3) To understand the potential applications and impact of AI in the future.<br>4. (PM4) To understand how artificial intelligence is being used to create music and art.<br><br>Online safety day – 11th Feb 2025<br>5.<u>https://www.saferinternetday.org/</u></td><td><u>Spring 2</u><br><u>Animation (PM lessons 1-3)</u><br>1. (PM1) To find out how 2Animate animations can be created in a similar way using technology.<br>2. (PM2) To learn about onion skinning in animation.<br>To add backgrounds and sounds to animations.<br>3 &4. (PM3) To be introduced to ‘stop motion’ animation.<br><br><u>Writing for Different Audiences (PM lessons 1)</u><br>5. (PM1) To explore how font size and style can affect the impact of a text. Use this as a starter to help remind chn of how to select different fonts and layout options. Can link writing</td><td><u>Summer 1</u><br><u>Coding – 2Code (PM lessons 1-6)</u><br>1. (PM1) To create a simple computer program.<br>2. (PM2) To understand how an IF statement works.<br>3. (PM3) To understand how to use coordinates in computer programming.<br>4. (PM4) To understand the Repeat until command.<br>5. (PM5) To use a number variable.<br>6. (PM6) To create a playable game.</td><td><u>Summer 2</u><br><u>Hardware Investigators (PM lessons 1&2)</u><br>1. (PM1) To understand the different parts that make up a desktop computer.<br>2. (PM2) To recall the different parts that make up a computer.<br><br><u>Effective Searching (PM lessons 1-3</u><br>3. (PM1) To locate information on the search results page.</td></tr>
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| | To practice and improve typing for home, bottom and top rows. | Understand that information put online leaves a digital footprint or trail and that this can aid identity theft.<br>4. **(PM2)** To Identify risks and benefits of installing software including apps.<br>5. **(PM3)** To understand the copying of others' work and presenting it as your own is called plagiarism.<br>6. **(PM4)** Identify positive and negative influences of technology on health and the environment.<br>Understand importance of balancing screen time with other parts of their lives. | | to topic. Use 2publish to record work. | | 4. **(PM2)** To use search effectively to find out information.<br>5. **(PM3)** To assess whether an information source is true and reliable |

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| **Y5** | **Autumn 1**<br>**Word Processing (PM1-8) Try to link to relevant topic**<br>1. **(PM1&2)** To become familiar with word processing document and add a picture.<br>2. **(PM3&4)** To edit pictures and text.<br>3. **(PM5&6)** To add finishing touches and share work<br>4. **(PM7&8)** To use tables to present data and use templates. | **Autumn 2**<br>**Online Safety (PM 3-4)**<br>1. **(PM3)** To search the internet with validity and cite our sources.<br>2. **(PM4)** To ensure reliability through different means of communication. | **Spring 1**<br>**Online safety day – 11th Feb 2025**<br>5.https://www.saferinternetday.org/ | **Spring 2**<br>**Coding – Sphero**<br>To design, input and test an increasingly complex set of instructions.<br>Design and write programmes that control physical systems.<br>Debug programs that accomplish specific goals.<br>To use logical reasoning to explain how increasingly complex algorithms solve a given problem.<br><br>*DT: apply their understanding of computing to program, monitor and control their products* | **Summer 1**<br>**Online Safety – Google Be Internet Legends Lesson Planning Be Internet Sharp – Think Before You Share (p.7-14 and p.62 - 64)**<br>1.Understand what having a positive digital footprint means and know why it is important.<br>Explain ways in which they can build a positive digital footprint.<br><br>**Be Internet Secure – Protect Your Stuff (29 – 37 and p. 68 – 71)**<br>2.Find ways to develop safe habits online, including the importance of protecting personal information.<br>How to respect online privacy boundaries for themselves and others.<br>Name ways to seek or ask for help if they or others feel unsafe online. | **Summer 2**<br>**Coding 2Code (PM 1-6)**<br>1. **(PM1)** To create a playable game.<br>2. **(PM2)** To program a simulation using 2Code.<br>3. **(PM3)** To know what decomposition and abstraction are in Computer Science.<br>4. **(PM4)** To understand how to use friction in code.<br>5. **(PM5)** To understand how to create a string.<br>6. **(PM6)** To understand what concatenation is and how it works. |
| | **Online Safety PM Lessons 1- 2** | **Game Creator (PM lessons 1-5)** | **Databases (PM lessons 1-4)** | | **Spreadsheets (PM lessons 1-5 )** | |

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| | 5. **(PM1)** To outline our responsibility online.<br>6. **(PM2)** To protect our privacy online. | 3. **(PM2&3)** To create a game quest.<br>4. **(PM4&5)** To finish and share the game.<br>To evaluate their and peers' games. | 1. **(PM1)** To learn how to search for information in a database.<br>2. **(PM2)**To contribute to a class database.<br>3. **(PM3&4)**To create a database around a chosen topic. | | 3. **(PM1)** Conversions of measurements.<br>4. **(PM2)** To use a spreadsheet to model a real-life problem.<br>5. **(PM3)** To use a spreadsheet to investigate the probability of the results of throwing many dice.<br>6. **(PM4&5)** To use the created spreadsheet to make decisions about these situations. | |
| | **KS2 National Curriculum:**<br>• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts<br>• Use sequence, selection and repetition in programs; work with variables and various forms of input and output<br>• Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs<br>• Understand computer networks including the Internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration<br>• Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content<br>• 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<br>• Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact<br>Key vocabulary: online safety, e-safety, username, password, confidential, personal, internet, blog, website, true, false, digital media, age restriction, device, content, simulation, probot, technology, charge, battery, coding, code, object, action, output, control, event, debug, debugging, bug, fix, algorithm, program, repetition, logical reasoning, prediction, stop motion animation, background, character, photograph, record, voice, sound, effect, app, email, communication, address, attachment, if command, timer, variable, design, X and Y properties, save, edit, open, new, positive digital footprint, Google, cyberbullying, digital literacy | | | | | |
| **Y6** | **Autumn 1**<br>**Coding – PM 2Code lessons 1-6** | **Autumn 2**<br>**Online Safety – PM lessons 1-3** | **Spring 1**<br>**Online safety day – 11th Feb 2025** | **Spring 2**<br>**Toontastic Digital Story Making/Animation** | **Summer 1**<br>**Digital Literacy – Text Adventurers** | **Summer 2**<br>**Online Safety**<br>**Be Internet Legends: Be internet alert – Respect** |

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| | 1. **(PM1)** To review good planning skills.<br>2. **(PM2)** To design programs using their choice of objects, attributing specific actions to each using their new programming knowledge.<br>3. **(PM3)** To use variables within a game to keep track of the properties of objects.<br>4. **(PM4)** To use functions and understand why they are useful in 2Code.<br>5. **(PM5)** To debug a program and organise the code into tabs.<br>6. **(PM6)** To organise code into functions and Call functions to eliminate surplus code in the program.<br><br>**BIG PICTURE:**<br>Create our own playable game<br>  | 1. **(PM1&2)** To revisit safety and to reflect on our digital footprints.<br>2. **(PM3)** To understand the positive and negative influence of technology on health and environment. | 5.https://www.saferinternetday.org/ | 1. and 2. Use Toontastic to create video/book (Link with English) to tell a story.<br>Create a sequence of images to create a short animation/film. | **PM lessons 1-4) Link to English**<br>1. **(PM1)** To use 2Connect to plan a 'Choose your own Adventure' type story.<br>2. **(PM2)** To make the adventure using 2Create a Story.<br>3. **(PM3)** To read and understand given code for a text adventure game<br>4. **(PM4)** To debug a text adventure. | **each other (Lesson 6 39-47 and 72-74 )**<br>1. Demonstrate ways to build positive and healthy online relationships and friendships.<br>Describe strategies they can use to respond to hurtful online behaviour in ways that keep them safe<br>Identify sources of support that can help friends and peers if they are experiencing hurtful behaviour online. |
| | | **Blogging (PM lessons 1-4)**<br>3. **(PM1)** To identify the purpose of writing a blog.<br>To identify the features of successful blog writing.<br>4. **(PM2&3)** To plan the theme and content for a blog<br>To understand how to write a blog. To consider the effect upon the audience of changing the visual properties of the blog.<br>5. **(PM4)** To understand the importance of commenting on blogs. | **Networks, Searching and How Computers Work.**<br><br>**See MTP unit saved on VLE.**<br><br>**Alternative PM Networks unit.** | **Online Safety**<br>**Be Internet Legends: Be internet alert – Check it's for real (Lesson 4 16-27 and 65-67)**<br>3.Describe ways to critically evaluate what we see on social media.<br>Explain how social media can mislead or misrepresent reality.<br>Identify different types of line scams children may experience including 'phishing'.<br>Identify sources of support for someone | | **Coding Sphero**<br>2. To solve problems by decomposing them into smaller parts.<br>3. Include use of sequences, variables, selection and repetition in programs and to explore real world problems.<br>4.To debug easily and quickly by using decomposition.<br>Use logical reasoning to explain how increasingly complex algorithms work.<br><br>*DT: apply their understanding of* |

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| | | | | who is worried about anything online. | | *computing to program, monitor and control their products* |