



## Computing Overview

| Year group          | Autumn 1  | Autumn 2   | Spring 1   | Spring 2   | Summer 1   | Summer 2   |
|---------------------|---|--|--|--|--|--|
| Nursery Skills      | <p><b>Electronic Communication Understanding Technologies</b> - Shows an interest in technological toys with knobs or pulleys, real objects such as cameras, and touchscreen devices such as interactive screen, table top computer and tablets</p> <p><b>Text and Multimedia</b> -Knows how to operate simple equipment, e.g. turn on CD player, uses a remote control, can navigate touch-capable technology with support</p> <p><b>Digital images and audio</b> - Know how to handle equipment safely. Begin to know that they shouldn't use devices without supervision</p> <p><b>Algorithms Handling information</b> - Knows that information can be retrieved from digital devices and the internet</p> <p><b>Develops digital literacy</b> -Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images</p> |  |  |  |  |  |
| Nursery Knowledge   | Explore different toys in role play such as telephones, cameras, keyboards.   | Can operate a simple CD player by pressing start and stop to play music.                           | Understands that we can search for information on 'google' by typing in a word to find out more. | Can use a simple board touch programme to draw picture by changing tools and colours using the onscreen options. | Can operate simple games on the iPad and know to open and end a programme.   | Can type their name on a keyboard by finding the letters of their name.  |
| Rec Skills          | <p><b>Electronic Communication Understanding Technologies</b> -Completes a simple program on electronic devices</p> <p><b>Text and Multimedia</b> - Begin to list different IT in their home</p> <p><b>Digital images and audio</b> -Research and E-Safety-Begin to give reasons why we need to stay safe online • Can use the internet with adult supervision to find and retrieve information of interest to them</p> <p><b>Algorithms Handling information</b> - Can create content such as a video recording, stories, and/or draw a picture on screen</p> <p><b>Develops digital literacy</b> skills by being able to access, understand and interact with a range of technologies</p>   |  |  |  |  |  |
| Reception Knowledge | Can turn on an Ipad, open a programme and follow instructions. Can explain how to stay safe when using the internet.  | Can follow teachers' instructions when using an online interactive programme such as paint or draw | Can write a variety of CVC words using a keyboard.   | To collect information about the measurement of plants and see which was the best environment for growing in.    | Can use the I Pad and class cameras to take their own images<br>Can send a group class email to a different class and wait for a response. | Can use 'google' to find out more information about animals and use the images to support their own representations. |



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| Year group | Autumn 1   | Autumn 2  | Spring 1  | Spring 2                                     | Summer 1   | Summer 2  |
|------------|--|---|---|--|--|---|
| 1          | 1.1 Online Safety and Exploring PM<br>1.2 Grouping and Sorting (2) | 1.3 Pictograms (3)<br>1.4 Lego Builders (3)             | 1.5 Maze Explorers (3)<br>Extra Robotics sessions (2) | 1.7 Coding (6)                               | 1.6 Animated Story Books (6)   | 1.8 Spreadsheets (3)<br>1.9 Technology Outside School (2)       |
| 2          | Exploring PM (1.1)<br>2.2 Online Safety (3)                        | 2.5 Effective Searching (3)<br>2.8 Presenting Ideas (4) | 2.1 Coding (5)  | 2.4 Questioning (5)                          | 2.3 Spreadsheets (4)<br>2.7 Making Music (3)                             | 2.6 Creating Pictures (7)<br>[Incorporate Robotics if possible] |
| 3          | Exploring PM (1.1) &<br>3.2 Online Safety (3)                      | 3.5 Email (6)   | 3.1 Coding (6)  | 3.4 Touch Typing (4)<br>3.3 Spreadsheets (3) | 3.6 Branching Databases (4)<br>3.7 Simulations                           | 3.8 Graphing<br>3.9 Presenting (PPT)                            |
| 4          | Exploring PM (1.1)<br>4.7 Effective Search (3)                     | 4.2 Online Safety (4)<br>4.3 Spreadsheets (6)           | 4.1 Coding (7)  | 4.4 Writing for Different Audiences (5)      | 4.5 Logo (4)<br>4.8 Hardware investigators (2)<br>[Incorporate Robotics] | 4.6 Animation (3)<br>4.9 Making Music (4)                       |
| 5          | Exploring PM (1.1)<br>5.2 Online Safety (3)<br>5.4 Databases (4)   | 5.5 Game Creator (5)                                    | 5.3 Spreadsheets (6)                                  | 5.1 Coding (7)                               | 5.7 Concept Maps (4)<br>5.8 Word Processing with Microsoft Word (4)      | 5.6 3D Modelling (4)  |
| 6          | Exploring PM (1.1)<br>6.2 Online Safety (2)<br>6.4 Blogging (4)    | 6.6 Networks (3)<br>6.8 Binary (4)                      | 6.1 Coding (7)  | 6.5 Text Adventures (5)                      | 6.9 Spreadsheets with Microsoft Excel (8)                                | Unit 6.7 Quizzing (6)   |

|  |                        |
|--|------------------------|
|  | Computer science       |
|  | Information Technology |
|  | Digital Literacy       |



## Computing in the Early Years and Foundation Stage

**Children in the Early Years and Foundation Stage will have opportunities to use Mini Mash or Purple Mash as part of their Computing experience to support them in working towards their early learning goals (see below).**

Children to be exposed to key vocabulary daily in provision. High quality resources will be provided for daily accessibility. Role-play areas will be a key area where a range of technologies will be used in play- telephones, microwaves, cookers, keyboards, televisions, CD player. These should be

| Computing                |  |                         |  |
|--------------------------|--|-------------------------|--|
| Three and Four-Year-Olds | Personal, Social and Emotional Development |                         | <ul style="list-style-type: none"> <li>Remember rules without needing an adult to remind them.</li> </ul>  |
|                          | Physical Development                       |                         | <ul style="list-style-type: none"> <li>Match their developing physical skills to tasks and activities in the setting.</li> </ul>   |
|                          | Understanding the World                    |                         | <ul style="list-style-type: none"> <li>Explore how thingswork.</li> </ul>  |
| Reception/               | Personal, Social and Emotional Development |                         | <ul style="list-style-type: none"> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing:               <ul style="list-style-type: none"> <li>- sensible amounts of 'screen time'.</li> </ul> </li> </ul> |
|                          | Physical Development                       |                         | <ul style="list-style-type: none"> <li>Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</li> </ul>  |
|                          | Expressive Arts and Design                 |                         | <ul style="list-style-type: none"> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>   |
| ELG                      | Personal, Social and Emotional Development | Managing Self           | <ul style="list-style-type: none"> <li>Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>Explain the reasons for rules, know right from wrong and try to behave accordingly.</li> </ul>   |
|                          | Expressive Arts and Design                 | Creating with Materials | <ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> </ul>  |