



## Corporation Road Community Primary School

### Computing LTP

| Computing: Year 1/2A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |
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| <b>Vision:</b><br>Computing in Corporation Road Primary School will be progressive, building children's computing skills in the areas of 'Computer Science', 'Information Technology' and 'Digital Literacy'. We will strive to ensure that all pupils can 'understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation'. That pupils can 'analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. That pupils can 'evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems' as outlined in the National Curriculum. We want children to know the application of computing in the wider world and how this can relate to future employment prospects. Our vision is that all pupils are able to keep themselves and others safe online and know when they need support and who/where to get it from. We want all pupils to understand about their own digital presence (including the use of Social Media) and how nothing that is posted online is never really deleted. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          |                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |
| Domains                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | Key Concepts                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |
| Information Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | Computing Systems & Networks                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |
| Computer Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | Programming A and Programming B                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |
| Digital Literacy and Creating Media                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          | Audio Media, Visual Media, Combining Audio & Visual Media and Data & Information |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |
| Autumn 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Autumn 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Spring 1                                                 | Spring 2                                                                         | Summer 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Summer 2                                |
| Technology Around Us                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Digital Painting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Digital Writing                                          | Grouping Data                                                                    | Moving a Robot                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Introduction to Animation               |
| <b>Domains:</b><br>- Information Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Domains:</b><br>- Digital Literacy and Creating Media                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Domains:</b><br>- Digital Literacy and Creating Media | <b>Domains:</b><br>- Digital Literacy and Creating Media                         | <b>Domains:</b><br>- Computer Science                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Domains:</b><br>- Computer Science   |
| <b>Key Concepts:</b><br>- Computing Systems & Networks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Key Concepts:</b><br>- Visual Media                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Key Concepts:</b><br>- Visual Media                   | <b>Key Concepts:</b><br>- Data & Information                                     | <b>Key Concepts:</b><br>- Programming A                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Key Concepts:</b><br>- Programming B |
| <b>End Point:</b><br><u>Information Technology</u><br>Pupils can use technology purposefully to organise, store and retrieve digital content including search technologies, understanding how the results are selected and ranked. They understand how computer networks, the internet and the World Wide Web work and how each of these can provide multiple services. They understand how these forms of networking help people with communication and collaboration. Pupils recognise how information technology is used beyond school, especially how it links to future employment opportunities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>End Point:</b><br><u>Digital Literacy and Creating Media</u><br>Pupils use technology safely, respectfully and responsibly. They understand how to keep personal information private and why it is important to do so. They understand the need to be discerning in evaluating digital content. Pupils recognise acceptable/unacceptable behaviour concerning information technology and can identify a range of ways to report their concerns.<br>Pupils can 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. |                                                          |                                                                                  | <b>End Point:</b><br><u>Computer Science End Point</u><br>Pupils can use a variety of programming language, software and hardware to interact with the real world and solve problems. They can understand and use terms such as programming, coding, algorithm, logic, abstraction, conditions, selection and data to explain how they have solved these problems. They can design, write and debug programmes that interact with hardware and/or to solve a given problem. |                                         |

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| <ul style="list-style-type: none"><li>- To identify technology in the classroom and explain how it helps us.</li><li>- To identify a computer and its main parts (switch on, log on and mouse).</li><li>- To use a mouse in different ways (open programs, click and drag).</li><li>- To use a keyboard to type (type name and save work).</li><li>- To use the keyboard to edit text (open work from a file, use arrow keys and delete letters).</li><li>- To create rules for using technology responsibly.</li></ul> | <ul style="list-style-type: none"><li>- To describe what freehand tools do (make marks, draw lines and pictures).</li><li>- To use the shape tool and the line tools (recreate work of an artist).</li><li>- To make careful choices when painting a digital picture (shapes, colours and in the style of an artist).</li><li>- To explain tool choices (use appropriate tools and colours).</li><li>- To use a computer independently to paint a picture (to use dots of colour, changing the colour and brush size).</li><li>- To compare painting a picture on a computer and on paper.</li></ul> | <ul style="list-style-type: none"><li>- To use a computer to write.</li><li>- To add and remove text (letters, numbers, space and backspace).</li><li>- To identify that the look of text can be changed on a computer (type capital letters and use the toolbar for bold, italic and underline).</li><li>- To make careful choices when changing text (double click, click and drag and change font).</li><li>- To explain tool choices (use undo to remove changes).</li><li>- To compare writing on a computer with writing on paper.</li></ul> | <ul style="list-style-type: none"><li>- To label objects (describe, match and group objects).</li><li>- To identify that objects can be counted (count groups of objects).</li><li>- To describe objects in different ways (properties of objects).</li><li>- To count objects with the same properties.</li><li>- To compare groups of objects (choose how to group, describe group and record how many objects in a group).</li><li>- To answer questions about groups of objects (decide how to group objects to answer a question, compare group and record and share findings).</li></ul> | <ul style="list-style-type: none"><li>- To explain what a given command will do (predict, match and run commands).</li><li>- To act out a given word (follow an instruction and give directions).</li><li>- To combine forwards and backwards commands to make a sequence.</li><li>- To combine four direction commands to make sequences.</li><li>- To plan a simple program (chose the order of commands and debug).</li><li>- To find more than one solution to a problem.</li></ul> | <ul style="list-style-type: none"><li>- To choose a command for a given purpose (move sprites).</li><li>- To show that a series of commands can be joined together (use more than one block, use a Start block and run program).</li><li>- To identify the effect of changing a value (find blocks that have numbers and change the value).</li><li>- To explain that each sprite has its own instructions (have more than one sprite, delete a sprite and add blocks to different sprites).</li><li>- To design the parts of a project (choose artwork, decide how sprites will move and create algorithms).</li><li>- To use my algorithm to create a program (use sprites that match design, add programming blocks based on algorithm and test programs).</li></ul> |
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