

## YEAR TWO

|                                                        | AUTUMN ONE                                                                                                                                                                                                                           | AUTUMN TWO                                                                                       | SPRING ONE                                                                                       | SPRING TWO                                                                                       | SUMMER ONE                                                                                       | SUMMER TWO                                                                                                                                                                                                                                                                               |
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| <b>AREA OF COMPUTING</b>                               | Digital Literacy                                                                                                                                                                                                                     | Information Technology                                                                           | Information Technology                                                                           | Information Technology                                                                           | Information Technology                                                                           | Computer Science                                                                                                                                                                                                                                                                         |
| <b>UNIT</b>                                            | Online Safety (4) – 2.2<br><br>Effective Searching (3) – 2.5                                                                                                                                                                         | 1) Creating Pictures (5) – 2.6<br><br>2) Making Music (3) – 2.7                                  | Questioning (5) – 2.4                                                                            | Presenting Ideas (4) – 2.8                                                                       | Spreadsheets (4) – 2.3                                                                           | Coding (6) – 2.1                                                                                                                                                                                                                                                                         |
| <b>PROGRAMMES</b>                                      | 2Respond for Online Safety<br>2Email                                                                                                                                                                                                 | 1) 2Paint a Picture<br>2) 2Sequence                                                              | 2Question<br>2Investigate                                                                        | 2Quiz<br>2Connect                                                                                | 2Calculate                                                                                       | 2Code                                                                                                                                                                                                                                                                                    |
| <b>NATIONAL CURRICULUM PROGRAMME OF STUDY COVERAGE</b> | 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. (2.2 and 2.5) | Use technology purposefully to create, organise, store, manipulate and retrieve digital content. | Use technology purposefully to create, organise, store, manipulate and retrieve digital content. | Use technology purposefully to create, organise, store, manipulate and retrieve digital content. | Use technology purposefully to create, organise, store, manipulate and retrieve digital content. | Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.<br><br>Create and debug simple programs.<br><br>Use logical reasoning to predict the behaviour of simple programs. |

## YEAR TWO

| AUTUMN ONE                                                                                                            | DIGITAL LITERACY | ONLINE SAFETY                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Units 2.2 Purple Mash |
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| SKILLS (LANCASHIRE KEY LEARNING)                                                                                      |                  | KNOWLEDGE AND UNDERSTANDING                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |
| Contribute ideas to class and group emails.                                                                           |                  | <p>Understand that an email has to be sent to a unique email address and the need for accuracy in typing the address.</p> <p>Understand that electronic messages can be in the form of pictures, sound and/or text.</p> <p>Understand the different ways that messages can be sent e.g. email, text messages, letter, phone, forums and begin to consider the advantages, or appropriateness, each one.</p>                                                             |                       |
| Send an email, using a subject heading, to a known member of the school community e.g. another class teacher, bursar. |                  | Understand that an email has to be sent to a unique email address and the need for accuracy in typing the address.                                                                                                                                                                                                                                                                                                                                                      |                       |
| Open and reply to an email from a known person.                                                                       |                  | <p>Understand that an email has to be sent to a unique email address and the need for accuracy in typing the address.</p> <p>Understand that electronic messages can be in the form of pictures, sound and/or text.</p>                                                                                                                                                                                                                                                 |                       |
| Develop an awareness of appropriate language to use in email and other forms of digital communication such as blogs.  |                  | <p>Understand that messages can quickly be sent electronically, via a range of devices, over distances and that people can reply to them.</p> <p>Understand that some emails may be malicious or inappropriate and begin to recognise when an attachment may be unsafe to open.</p>                                                                                                                                                                                     |                       |
| Talk openly about their use of online communication in school and at home.                                            |                  | <p>Understand that messages can quickly be sent electronically, via a range of devices, over distances and that people can reply to them.</p> <p>Understand that some emails may be malicious or inappropriate and begin to recognise when an attachment may be unsafe to open.</p> <p>Understand the different ways that messages can be sent e.g. email, text messages, letter, phone, forums and begin to consider the advantages, or appropriateness, each one.</p> |                       |

## YEAR TWO

| AUTUMN ONE                                                                                                                                                            | DIGITAL LITERACY | EFFECTIVE SEARCHING                                                                                                                                         | Units 2.5 Purple Mash |
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| SKILLS (LANCASHIRE KEY LEARNING)                                                                                                                                      |                  | KNOWLEDGE AND UNDERSTANDING                                                                                                                                 |                       |
| Locate specific, teacher defined, age appropriate websites through a favourites menu and /or by typing a website address (URL) into the address bar in a web browser. |                  | Understand a website has a unique address and the need for precision when typing it.                                                                        |                       |
| Use technology to source, generate and amend ideas e.g. searching a resource such as Espresso for images by a specific artist.                                        |                  | Understand and discuss how information can be obtained and used to answer specific questions.                                                               |                       |
| Talk about their use of technology and other ways of finding information, e.g. books, asking other people.                                                            |                  | Understand that technology can give rapid access to a wide variety of information and resources, including internet, TV, DVDs                               |                       |
|                                                                                                                                                                       |                  | Understand that there are different ways of finding information, e.g. books, asking other people                                                            |                       |
|                                                                                                                                                                       |                  | Understand that different forms of information, e.g. text, images, sound, multimedia exist and that some are more useful for specific purposes than others. |                       |
|                                                                                                                                                                       |                  | Understand and discuss how information can be obtained and used to answer specific questions.                                                               |                       |
|                                                                                                                                                                       |                  | Begin to understand that not everything on the internet is true.                                                                                            |                       |
| Use and explore appropriate buttons, arrows, menus and hyperlinks to navigate teacher selected web sites, and other sources of stored information.                    |                  | Be aware that they can be accidentally diverted from websites through a link to a new website, advertising or pop-ups.                                      |                       |
| Use key words to search a specific resource for information, e.g. Espresso and other websites, under the guidance and supervision of an adult.                        |                  | Begin to understand that some websites are more useful than others when searching for topics.                                                               |                       |
| Be able to retrieve files from a computer using a search of the computer.                                                                                             |                  | Understand that files can be retrieved and found on a computer using a search of the computer.                                                              |                       |

## YEAR TWO

| AUTUMN TWO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | INFORMATION TECHNOLOGY | CREATING PICTURES                                                                                                                                                                                                                                                                                                                                                                          | Unit 2.6 Purple Mash |
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| SKILLS (LANCASHIRE KEY LEARNING)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | KNOWLEDGE AND UNDERSTANDING                                                                                                                                                                                                                                                                                                                                                                |                      |
| <p>On a range of devices:</p> <ul style="list-style-type: none"> <li>- Develop correct use of the keyboard (e.g. spacebar, backspace, delete, shift (not caps lock) and enter keys).</li> <li>- Add captions to photos and graphics.</li> <li>- Select text appropriately e.g. highlighting or clicking text to select.</li> <li>- Make simple changes to text e.g. colour, style and size.</li> <li>- Select text from word lists (if necessary).</li> <li>- Select appropriate images to add to work.</li> <li>- Navigate round text in a variety of ways e.g. mouse, arrow keys, touch, when editing work.</li> </ul> |                        | <p>Know that text can be different colours, sizes and styles and that these can easily be changed.</p> <p>Know that there are various ways of capturing still and moving images.</p> <p>Understand the need to frame an image or scene and keep the camera still.</p> <p>Know that technology can be used to communicate ideas in different ways, e.g. text, images, tables and sound.</p> |                      |
| <p>Refine the use of shape, line and colour to communicate a specific idea or artistic style/effect through various tools including brushes, pens, lines, flood fill, spray and stamps.</p>                                                                                                                                                                                                                                                                                                                                                                                                                              |                        | <p>Understand there are a variety of tools in graphics packages, each fulfilling a different purpose.</p> <p>Understand the differences between a graphics package and paper based art activities.</p>                                                                                                                                                                                     |                      |
| <p>Change the content of a project for a specific audience.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | <p>Understand how the mood of a piece can easily be changed through use of text, graphics and sound.</p>                                                                                                                                                                                                                                                                                   |                      |
| <p>Organise and name files appropriately and accurately.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        | <p>Understand the importance that files need to be organised and named appropriately and accurately.</p> <p>Know the importance of giving an appropriate name to files.</p>                                                                                                                                                                                                                |                      |
| <p>Save and store work in an appropriate area, and be able to print, retrieve and amend it.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | <p>Know that files can be stored in folders and how the structure of the directory is ordered.</p> <p>Understand that files can be retrieved from their location and edited.</p>                                                                                                                                                                                                           |                      |

## YEAR TWO

| AUTUMN TWO                                                                                                                             |  | INFORMATION TECHNOLOGY |  | MAKING MUSIC                                                                                                                                                  |  | Unit 2.7 Purple Mash |  |
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| SKILLS (LANCASHIRE KEY LEARNING)                                                                                                       |  |                        |  | KNOWLEDGE AND UNDERSTANDING                                                                                                                                   |  |                      |  |
| Explore a range of electronic music and sound devices and software.                                                                    |  |                        |  | Understand that most devices have stop, record and playback functions.                                                                                        |  |                      |  |
| Be able to listen to and to select a sound from a bank of pre-recorded sounds.                                                         |  |                        |  | Be aware that sound can be recorded and stored on the computer as a sound file.                                                                               |  |                      |  |
| Use sound recorders, both at and away from the computer, to record and playback sounds e.g. voices, instruments, environmental sounds. |  |                        |  | Understand that most devices have stop, record and playback functions.<br><br>Be aware that sound can be recorded and stored on the computer as a sound file. |  |                      |  |
| Use software to explore and create sound and musical phrases for a purpose.                                                            |  |                        |  | Understand that most devices have stop, record and playback functions.                                                                                        |  |                      |  |
| Use basic editing tools to change recorded sounds (speed up, slow down, reverse, echo) to alter the mood or atmosphere                 |  |                        |  | Understand that most devices have stop, record and playback functions.                                                                                        |  |                      |  |
| Use recorded sound files in other software applications.                                                                               |  |                        |  | Be aware that sound can be recorded and stored on the computer as a sound file.                                                                               |  |                      |  |
| Be able to save sound files.                                                                                                           |  |                        |  | Be aware that sound can be recorded and stored on the computer as a sound file.                                                                               |  |                      |  |
| Be able to share recordings with a known audience.                                                                                     |  |                        |  |                                                                                                                                                               |  |                      |  |

## YEAR TWO

| SPRING ONE                                                                                                                                   |  | INFORMATION TECHNOLOGY                                                                                                                                                                                                                     | QUESTIONING | Unit 2.4 Purple Mash |
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| SKILLS (LANCASHIRE KEY LEARNING)                                                                                                             |  | KNOWLEDGE AND UNDERSTANDING                                                                                                                                                                                                                |             |                      |
| Interpret the graphs, discuss the information contained and answer simple questions.                                                         |  | <p>Understand that IT can be used to sort items and information.</p> <p>Understand that IT can be used to create and display charts graphs.</p> <p>Understand that IT can be used to add to and change charts and graphs quite easily.</p> |             |                      |
| Sort and classify a group of items by asking simple yes / no questions. This may take place away from the computer, e.g. a 'Guess Who' game. |  | <p>Begin to understand that unless data has been entered accurately it cannot be used to provide correct answers to questions.</p> <p>Understand that IT can be used to sort items and information.</p>                                    |             |                      |
| Use a branching database program to sort and identify items.                                                                                 |  | Understand that IT can be used to sort items and information.                                                                                                                                                                              |             |                      |
| Use basic search tools in a prepared database to answer simple questions e.g. how many children have brown hair?                             |  | Begin to understand that unless data has been entered accurately it cannot be used to provide correct answers to questions.                                                                                                                |             |                      |

| SPRING TWO | INFORMATION TECHNOLOGY | PRESENTING IDEAS | Unit 2.8 Purple Mash |
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## YEAR TWO

| SKILLS (LANCASHIRE KEY LEARNING)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | KNOWLEDGE AND UNDERSTANDING                                                                                                                                                                                                                                                                                                           |
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| <p>On a range of devices:</p> <ul style="list-style-type: none"> <li>- Develop correct use of the keyboard (e.g. spacebar, backspace, delete, shift (not caps lock) and enter keys).</li> <li>- Add captions to photos and graphics.</li> <li>- Select text appropriately e.g. highlighting or clicking text to select.</li> <li>- Make simple changes to text e.g. colour, style and size.</li> <li>- Select text from word lists (if necessary).</li> <li>- Select appropriate images to add to work.</li> <li>- Word process short texts directly onto the computer (i.e. do not just copy up handwritten work).</li> <li>- Navigate round text in a variety of ways e.g. mouse, arrow keys, touch, when editing work.</li> </ul> | <p>Know that text can be different colours, sizes and styles and that these can easily be changed.</p> <p>Know that technology can be used to communicate ideas in different ways, e.g. text, images, tables and sound.</p> <p>Understand there are a variety of tools in graphics packages, each fulfilling a different purpose.</p> |
| <p>Save and store work in an appropriate area, and be able to print, retrieve and amend it.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Know that files can be stored in folders and how the structure of the directory is ordered.</p> <p>Understand that files can be retrieved from their location and edited. Know what the term multimedia means.</p>                                                                                                                 |
| <p>Use a range of digital devices to capture and save both still and moving images. These could include digital cameras, video cameras, tablets.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>Know that there are various ways of capturing still and moving images.</p> <p>Know that there are various ways of capturing still and moving images.</p> <p>Understand the need to frame an image or scene and keep the camera still.</p>                                                                                          |
| <p>Upload images or video from cameras and other digital devices to a computer, or into a document, with support if needed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Know how to take images appropriately and responsibly.</p>                                                                                                                                                                                                                                                                         |
| <p>Begin to add different forms of media together e.g. text and images in blogs or word processing documents.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Begin to understand that images, sounds and text can be subject to copyright.</p> <p>Start to understand that content needs to be changed according to the audience.</p>                                                                                                                                                           |
| <p>Organise and name files appropriately and accurately.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>Know the importance of giving an appropriate name to files.</p>                                                                                                                                                                                                                                                                    |

## YEAR TWO

| SUMMER ONE                                                                                   |  | INFORMATION TECHNOLOGY |  | SPREADSHEETS                                                                                                                                               |  | Unit 2.3 Purple Mash |  |
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| SKILLS (LANCASHIRE KEY LEARNING)                                                             |  |                        |  | KNOWLEDGE AND UNDERSTANDING                                                                                                                                |  |                      |  |
| Develop classification skills by carrying out sorting activities                             |  |                        |  | Understand that IT can be used to create and display charts graphs.                                                                                        |  |                      |  |
| Use simple graphing software to produce pictograms and other basic tables, charts or graphs. |  |                        |  | Understand that IT can be used to create and display charts graphs.<br>Understand that IT can be used to add to and change charts and graphs quite easily. |  |                      |  |
| Use graphing software to enter data and change a graph type, e.g. pictogram to bar chart.    |  |                        |  | Understand that IT can be used to create and display charts graphs.<br>Understand that IT can be used to add to and change charts and graphs quite easily. |  |                      |  |

## YEAR TWO

| SUMMER TWO                                                                                                                                                                 |  | COMPUTER SCIENCE                                                                                                                                                                                                                                                                                                                                                                       | CODING | Unit 2.1 Purple Mash |
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| SKILLS (LANCASHIRE KEY LEARNING)                                                                                                                                           |  | KNOWLEDGE AND UNDERSTANDING                                                                                                                                                                                                                                                                                                                                                            |        |                      |
| Give and follow commands (one at a time) to navigate other children and programmable toys around a course or a familiar journey, including straight and turning movements. |  | Understand that devices respond to commands.<br>Understand the meaning of the term program.                                                                                                                                                                                                                                                                                            |        |                      |
| Plan, generate and follow a sequence of instructions (actual and on-screen) to make something happen; or complete a given task or problem to create a simple program.      |  | Understand that algorithms are a series of steps or instructions to achieve a specific goal.<br>Understand the meaning of the term program.                                                                                                                                                                                                                                            |        |                      |
| Explore and create sequences of commands/instructions in a variety of programs/devices.                                                                                    |  | Understand that algorithms are a series of steps or instructions to achieve a specific goal.<br>Understand the meaning of the term program.<br>Understand that there are different ways to create or produce a sequence of commands, including verbal, recorded, graphical, pressing buttons and on screen methods.<br>Talk about devices in the home that are controlled by commands. |        |                      |
| Make predictions and describe the effects when creating programs and controlling devices.                                                                                  |  | Understand the meaning of the term program.<br>Understand that prediction, trial and error are important considerations when creating programs or controlling movement.                                                                                                                                                                                                                |        |                      |
| Identify errors in instructions.                                                                                                                                           |  | Understand what debugging is and begin to understand that you can develop strategies to help find bugs.                                                                                                                                                                                                                                                                                |        |                      |
| Use logical reasoning to predict what will happen in simple programs.                                                                                                      |  | Understand what logical reasoning is and how it can be used to predict what happens in simple programs.                                                                                                                                                                                                                                                                                |        |                      |