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| **IT -Information Technology** | **DL - Digital Literacy** | **CS - Computer Science** |

Class 2 onwards have a discrete timetabled lesson of computing each week, during these lessons essential skills are taught. All areas of computing are covered throughout the year – Computer Science, Digital Literacy and Information Technology. It is also expected that computing will be incorporated within all other subjects of the curriculum. E-safety although covered throughout the year through the Digital Literacy strand will also be addressed on internet safety day.

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| **Class** | | **Autumn** | **Spring** | **Summer** |
| **EYFS** | | | | |
| **1** | |  |  |  |
| **Continuous Provision** | **Continuous Provision** | **Continuous Provision** |
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| **Continuous provision** | **Continuous Provision** | **Continuous Provision** |
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| Continuous provision of Computing / ICT is to include modelling expectations of appropriate use, encouragement of independent use, development of personal responsibility, development of understanding of purpose of use and to support turn taking and cooperation. | | | | |

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| **Class** | **Autumn** | | **Spring** | | **Summer** | |
| **2** | **E-safety**   * Access digital content online * Choose content to watch or listen to on a familiar web page * To understand that for most people the internet is an integral part of life and has many benefits   **What is a computer?**   * Explore technology * Recognise different digital devices, e.g. computer, camera, tablet | **Multimedia:**  **Art**   * Access a range of multimedia content * Create simple digital content, e.g. mark making in a paint program | **Data:**  **Counting**   * Access content in different formats, e.g. image, video, audio * Choose between media in different formats * Identify objects of a single category * Count 1 or more in a digital resource * Sort familiar objects into 2 given categories with support | **Multimedia:**  **Sound and Music**   * Access a range of multimedia content * Demonstrate a preference for digital content from a selection, e.g. choose a video to watch * Use technology to explore and access digital content | **Programming & Algorithms**   * Explore technology * Make something happen with technology * Expect an outcome from an action * Repeat an action with technology to trigger a specific outcome | **Multimedia:**  **Photographs**   * Access a range of multimedia content * Use technology to explore and access digital content * Operate a digital device with support to fulfil a task, e.g. take a photograph |
| **3** | **E-safety**   * Access digital content online * Choose content to watch or listen to on a familiar web page * To understand that for most people the internet is an integral part of life and has many benefits * To be aware of the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physcial wellbeing   **What is a computer?**   * Explore technology * Recognise different digital devices, e.g. computer, camera, tablet * Access content using an appropriate access device * Choose appropriate technology from a limited selection to fulfil a familiar task | **Data:**  **Counting**   * Access content in different formats, e.g. image, video, audio * Choose between media in different formats * Identify objects of a single category * Count 1 or more in a digital resource * Sort familiar objects into 2 given categories with support * Recognise content in a range of formats, e.g. text, image, video, audio | **Multimedia:**  **Films**   * Access a range of multimedia content * Use technology to explore and access digital content * Demonstrate a preference for digital content from a selection, e.g. choose a video to watch * Understand you can control multimedia content, e.g. play and stop video and audio * Operate a digital device independently to fulfil a task | **Programming & Algorithms**   * Explore technology * Make something happen with technology * Expect an outcome from an action * Repeat an action with technology to trigger a specific outcome * Control technology for a purpose   Recognise the success or failure of an action | **Multimedia:**  **Art**   * Access a range of multimedia content * Use technology to explore and access digital content * Create simple digital content, e.g. mark making in a paint program * Select basic options in a familiar application, e.g. colour of pen * Choose media from a selection to convey information, e.g. image for a poster | **Multimedia:**  **Sound and Music**   * Access a range of multimedia content * Use technology to explore and access digital content * Demonstrate a preference for digital content from a selection, e.g. choose a video to watch * Understand you can control multimedia content, e.g. play and stop video and audio * Operate a digital device independently to fulfil a task |
| **4** | **E-safety**   * Are aware that some online content is inappropriate * Are aware that information can be public or private * that for most people the internet is an integral part of life and has many benefits * about the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physcial wellbeing * How to consider the effect of their online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private * Understand why social media, some computer games and online gaming, for example, are age restricted   **What is a computer?**   * Understand that you can access content on a digital device * Use a mouse, touchscreen or appropriate access device to target and select options on screen * Recognise and use a range of digital devices * Recognise the basic parts of a computer, e.g. mouse, screen, keyboard * Recognise basic parts of a keyboard, e.g. spacebar, numbers and letters * Understand that you can access the same content on different devices * Add text to a document using the keyboard or appropriate access device * Understand that information and media can be stored on a digital device, e.g. they ask to view a photo that has been taken on a tablet | **Programming & Algorithms**   * Follow simple instructions to control a digital device * Understand that we control computers * Identify the steps of a known task | **Multimedia:**  **EBooks**   * Select media (e.g. images, video, sound) to present information on a topic * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content * Plan out digital content * Present ideas and information by combining media independently | **Data:**  **Counting, sorting**   * Count 1 or more in a digital resource * Recognise content in a range of formats, e.g. text, image, video, audio * Sort familiar objects into 1 or more categories * Answer basic questions about information displayed in images, e.g. more or less * Can distinguish between text, image, video and audio content * Collect simple data (e.g. likes/dislikes) on a topic * Can present simple data using images, e.g. number of animals * Sort familiar objects into 2 given categories with support | **Multimedia:**  **Films, Animation**   * Use technology to explore and access digital content * Operate a digital device independently to fulfil a task * Select media (e.g. images, video, sound) to present information on a topic * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content | **Programming & Algorithms**   * Try alternative approaches to achieve a goal * Input a short sequence of instructions to control a device * Can order two or three steps of a known task * Recognise patterns in groups of objects |
| **5** | **E-safety**   * Are aware that some online content is inappropriate * Are aware that information can be public or private * Recognise inappropriate content and know to tell an appropriate adult * Can describe what makes a good friend * Understand that for most people the internet is an integral part of life and has many benefits * Understand about the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physcial wellbeing * How to consider the effect of their online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private * Understand why social media, some computer games and online gaming, for example, are age restricted * Know that the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health.   **What is a computer?**   * Add text to a document using the keyboard or appropriate access device * Understand that information and media can be stored on a digital device, e.g. they ask to view a photo that has been taken on a tablet * Identify and name a range of digital devices and technologies * Explain what the basic parts of a computer are used for, e.g. mouse, screen, keyboard * Understand that you can find information from a website * Use a simple password when logging on, where relevant * Understand that you can share digital content   **Programming & Algorithms**   * Follow simple instructions to control a digital device * Understand that we control computers * Identify the steps of a known task * Try alternative approaches to achieve a goal | **Multimedia:**  **Sound and Music**   * Operate a digital device independently to fulfil a task * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content * Talk about what makes digital content good or bad | **Data:**  **Counting, sorting, pictograms**   * Recognise content in a range of formats, e.g. text, image, video, audio * Sort familiar objects into 1 or more categories * Answer basic questions about information displayed in images, e.g. more or less * Can distinguish between text, image, video and audio content * Collect simple data (e.g. likes/dislikes) on a topic * Can present simple data using images, e.g. number of animals * Identify an object by asking yes/no questions * Recognise charts, tables or branching databases and understand why we use them * Explain information shown in a simple chart, pictogram, info graphic or database | **Multimedia:**  **EBooks**   * Operate a digital device independently to fulfil a task * Select basic options in a familiar application, e.g. colour of pen * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Select media (e.g. images, video, sound) to present information on a topic | **Programming & Algorithms**   * Input a short sequence of instructions to control a device * Can order two or three steps of a known task * Recognise patterns in groups of objects * Identify and list the steps of a known task in order * Understand that we control computers by giving them instructions * Create a simple program e.g. to control a floor robot | **Multimedia:**  **Art**   * Operate a digital device independently to fulfil a task * Select basic options in a familiar application, e.g. colour of pen * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Select tools or options to change the appearance of digital content |
| **6** | **E-safety**   * Recognise inappropriate content and know to tell an appropriate adult * Can describe what makes a good friend * Understand that you can share digital content online * Understand what personal information is and the need to keep it private * Understand that for most people the internet is an integral part of life and has many benefits * Understand about the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physcial wellbeing * How to consider the effect of their online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private * Understand why social media, some computer games and online gaming, for example, are age restricted * Know that the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health. * How to be a discerning consumer of information, including that from search engines is ranked, selected and targeted * Know where and how to report concerns and get support with issues online   **What is a computer?**   * Recognise and use a range of input devices, e.g. mouse, keyboard, touchscreen * Recognise and use a range of output devices, e.g. printer, speakers, monitor/screen * Recognise that a range of devices contain computers, e.g. washing machine, car, laptop * Understand that the Internet is made up of computers from all around the world connected together * Understand that you can use a search engine to find information using keyword searches   **Multimedia:**  **Photographs, Text**   * Select basic options in a familiar application, e.g. colour of pen * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Select media (e.g. images, video, sound) to present information on a topic * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content * Edit digital content to achieve a particular effect or improve it * Talk about what makes digital content good or bad | **Multimedia:**  **Films**   * Operate a digital device independently to fulfil a task * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content   Talk about what makes digital content good or bad | **Programming & Algorithms**   * Understand what an algorithm is * Create a simple algorithm * Identify and explain patterns in groups of objects * Debug an error in a simple algorithm or program e.g. for a floor robot | **Multimedia:**  **Sound and Music**   * Operate a digital device independently to fulfil a task * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content   Talk about what makes digital content good or bad | **Data:**  **Pictograms, Branching Databases**   * Identify an object by asking yes/no questions * Recognise charts, tables or branching databases and understand why we use them * Explain information shown in a simple chart, pictogram, infographic or database * Use specific software to create simple charts * Collect data on a topic (eye colour, pets etc.) * Present data in a pictogram independently * Identify an object using a branching database | **Programming & Algorithms**   * Identify and list the steps of a known task in order * Understand that we control computers by giving them instructions * Create a simple program e.g. to control a floor robot * Understand what an algorithm is * Create a simple algorithm * Identify and explain patterns in groups of objects * Debug an error in a simple algorithm or program e.g. for a floor robot |
| **6B/7W**  **(cross-curricular)** | **E-SAFETY**   * Explore technology * Choose content to watch/listen * To understand that for most people the internet is an integral part of life and has many benefits * To be aware of the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physcial wellbeing | **Multimedia: Art**   * Use paint to create art (link to topic theme) | **Multimedia: Sound and Music**   * Choose and access digital content (link to topic theme) | **Programming & Algorithms**   * Explore the use of technology/ following instructions to get a desired response | **Data: Counting**   * Use program to count objects on IWB/ sorting into categories | **Multimedia: Photographs**   * Operate and explore a digital device (link to topic theme) |

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| **Class** | **Autumn** | | **Spring** | | **Summer** | |
| **P1 & P2** | **E-safety**   * Understand that you can share digital content online * Understand what personal information is and the need to keep it private * Understand the need for safe and responsible use of information, communication technology (including safe management of own and others' personal data including images) * Know who to tell if concerned about content or contact online * What to do and where to get support to report material or manage issues online * Understand why we use passwords * Can remember a simple password and know not to tell anyone * Can identify rules to add to an acceptable use policy for the class   **Key Skills**   * Get quicker at typing with both hands. * Use a variety of font sizes, styles and colours. * Align text left, right and centre. * Create a title slide and choose a style. * Change the layout of a slide. * Insert a picture/text/graph from the Internet or personal files. * Decide upon and use effective transitions. * Know where to save and open work | **Algorithms & Programming**   * Understand what an algorithm is * Create a simple algorithm * Identify and explain patterns in groups of objects * Debug an error in a simple algorithm or program e.g. for a floor robot * Predict the outcome of a simple algorithm or program | **E-safety**   * Understand that digital content belongs to the person who first created it * Save and reuse digital content found online * Understand what makes a good online friend and the need to be kind and thoughtful online as in the real world   **Data**   * Identify an object by asking yes/no questions * Recognise charts, tables or branching databases and understand why we use them * Explain information shown in a simple chart, pictogram, infographic or database * Use specific software to create simple charts * Collect data on a topic (eye colour, pets etc.) * Present data in a pictogram independently * Identify an object using a branching database * Create a branching database using pre-prepared images and questions * Recognise an error in a branching database. * Find out similar information in different formats, e.g. text, video, audio * Explain how different formats communicate information and their benefits * Independently plan out and create a branching database * Evaluate a given branching database and suggest improvements * Understand that the questions you ask are important, when collecting data | **Multimedia: Photos; Sound & Music; eBooks**   * Select media (e.g. images, video, sound) to present information on a topic * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content * Plan out digital content * Present ideas and information by combining media independently * Edit digital content to achieve a particular effect or improve it * Talk about what makes digital content good or bad | **E-safety**   * Understand that spending a long time in front of a computer screen can be unhealthy * Understand that when we share content online, we might not be able to delete it * how information and data is generated, collected, shared and used online. * Know that not all information found online is true * Understand that the digital content we make belongs to us and others need to ask permission to use it. * the impact of viewing harmful content   **Algorithms & Programming**   * Understand that computers have no intelligence and we have to program them to do things * Understand that the order of instructions in an algorithm is important * Understand that instructions in an algorithm need to be clear and unambiguous * Evaluate the success of an algorithm or program * Identify and correct errors in a given algorithm or program (debugging) * Use the language if… then to describe the relationship between two actions. | **Multimedia: Art; Working with text**   * Select media (e.g. images, video, sound) to present information on a topic * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content * Plan out digital content * Present ideas and information by combining media independently * Edit digital content to achieve a particular effect or improve it * Talk about what makes digital content good or bad |
| **P3** | **E-safety**   * Can identify rules to add to an acceptable use policy for the class * Know who to tell if concerned about content or contact online   **Multimedia: Sound & Music;**  **Presentation**   * Operate a digital device independently to fulfil a task * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content * Talk about what makes digital content good or bad | **Algorithms & Programming**   * Understand what an algorithm is * Create a simple algorithm * Identify and explain patterns in groups of objects * Debug an error in a simple algorithm or program e.g. for a floor robot | **E-safety**   * Understand what personal information is and the need to keep it private * Know who to tell if concerned about content or contact online * Understand why we use passwords * Can remember a simple password and know not to tell anyone   **Key skills**   * Use spacebar, backspace, delete, arrow keys, return * Start to use two hands when typing. * Word process short texts to present. | **Data**   * Identify an object by asking yes/no questions * Recognise charts, tables or branching databases and understand why we use them * Explain information shown in a simple chart, pictogram, infographic or database * Use specific software to create simple charts * Collect data on a topic (eye colour, pets etc.) * Present data in a pictogram independently   Identify an object using a branching database | **E-safety**   * Understand that spending a long time in front of a computer screen can be unhealthy * Understand that when we share content online, we might not be able to delete it * Know that not all information found online is true   **Multimedia: Photos; Animation; Working with Text**   * Select basic options in a familiar application, e.g. colour of pen * Choose a digital device from a selection to complete a specific task * Present information using appropriate software with support * Select media (e.g. images, video, sound) to present information on a topic * Understand that you can edit and change digital content * Select tools or options to change the appearance of digital content * Edit digital content to achieve a particular effect or improve it * Talk about what makes digital content good or bad | **Algorithms & Programming**   * Identify and list the steps of a known task in order * Understand that we control computers by giving them instructions * Create a simple program e.g. to control a floor robot * Understand what an algorithm is * Create a simple algorithm * Identify and explain patterns in groups of objects   Debug an error in a simple algorithm or program e.g. for a floor robot |
| **P4** | **Pictograms**   * Identify objects of a single category * Count 1 or more in a digital resource * Sort familiar objects into 2 given categories with support | **Pictograms**   * Answer basic questions about information displayed in images, e.g. more or less * Collect simple data (e.g. likes/dislikes) on a topic * Can present simple data using images, e.g. number of animals * Sort familiar objects into 2 given categories with support | **Presenting Ideas**   * Access a range of multimedia content * Use technology to explore and access digital content * Create simple digital content, e.g. mark making in a paint program * Select basic options in a familiar application, e.g. colour of pen * Choose media from a selection to convey information, e.g. image for a poster | **Presenting Ideas**   * Select basic options in a familiar application, e.g. colour of pen * Choose media from a selection to convey information, e.g. image for a poster | **E-safety**   * Can identify rules to add to an acceptable use policy for the class * Know who to tell if concerned about content or contact online | **E-safety**   * Understand that spending a long time in front of a computer screen can be unhealthy * Understand what personal information is and the need to keep it private |
| **Q1, Q2 & Q3** | **E-safety**   * Understand that you can share digital content online * Understand what personal information is and the need to keep it private * Know who to tell if concerned about content or contact online * Understand why we use passwords * Can remember a simple password and know not to tell anyone * Can identify rules to add to an acceptable use policy for the class   **ASDAN** | **ASDAN** | **E-safety**   * Understand that digital content belongs to the person who first created it * Save and reuse digital content found online * Understand what makes a good online friend and the need to be kind and thoughtful online as in the real world   **ASDAN** | **PSD** | **E-safety**   * Understand that spending a long time in front of a computer screen can be unhealthy * Understand that when we share content online, we might not be able to delete it * Know that not all information found online is true * Understand that the digital content we make belongs to us and others need to ask permission to use it   **PSD** | **Algorithms & Programming**   * Understand that computers have no intelligence and we have to program them to do things * Understand that the order of instructions in an algorithm is important * Understand that instructions in an algorithm need to be clear and unambiguous * Evaluate the success of an algorithm or program * Identify and correct errors in a given algorithm or program (debugging)   Use the language if… then to describe the relationship between two actions. |
| **Q4** | **E-safety**   * Can identify rules to add to an acceptable use policy for the class * Know who to tell if concerned about content or contact online   **Using the internet**   * Type in a URL to find a website. * Add websites to a favourites list. * Use a search engine to find a range of media, e.g. images, texts * Think of search terms to use linked with questions they wish to answer. * Talk about the reliability of information on the Internet, e.g. the difference between fact and opinion. | **Key Skills**   * Use spacebar, backspace, delete, arrow keys, return * Start to use two hands when typing. * Word process short texts to present.   **Unit awards** | **E-safety**   * Understand what personal information is and the need to keep it private * Know who to tell if concerned about content or contact online * Understand why we use passwords * Can remember a simple password and know not to tell anyone   **Data**   * Recognise content in a range of formats, e.g. text, image, video, audio * Sort familiar objects into 1 or more categories * Answer basic questions about information displayed in images, e.g. more or less * Can distinguish between text, image, video and audio content * Collect simple data (e.g. likes/dislikes) on a topic | **Presenting Ideas**   * Access a range of multimedia content * Use technology to explore and access digital content * Create simple digital content, e.g. mark making in a paint program * Select basic options in a familiar application, e.g. colour of pen * Choose media from a selection to convey information, e.g. image for a poster * Select basic options in a familiar application, e.g. colour of pen * Choose media from a selection to convey information, e.g. image for a poster | **E-safety**   * Understand that spending a long time in front of a computer screen can be unhealthy * Understand that when we share content online, we might not be able to delete it * Know that not all information found online is true   **Unit awards** | **Data**   * Can present simple data using images, e.g. number of animals * Identify an object by asking yes/no questions * Recognise charts, tables or branching databases and understand why we use them * Explain information shown in a simple chart, pictogram, info graphic or database |