



Year 1

Media	Data Handling	Programming	Impact of Technology	Online Safety
Overview				
In Term 2, the children have the opportunity to access the computers throughout the day in Hazel Class. They will learn to control a mouse, enter words on the keyboard and persevere to create a finished piece. During the final week of the term, Year 1 will design a habitat for their Dinosaurs using Textease Paint Program. They will use a range of brushes, tools and shapes to fill the background. This will then be printed and used as the background in a Moving Picture for their DT project.	To support the children's understanding of Data, we use a familiar website, J2Code, to carry out this unit. This is linked with our topic of outdoor learning (plants, trees and minibeasts). The children learn to organise objects into groups using an online Venn Diagram, they then move onto creating their own pictogram after this is shown through a teacher led activity. In pairs they must research the rest of the class's favourite minibeast and confidently share their results with the rest of the class by answering questions.	To introduce programming in Year 1, we begin this unit by reading texts that involve instructions. We discuss what is important when giving instructions to someone else and what could happen if we give the wrong instructions! Children work in an open space to try and follow one another's instructions. As the term continues the children build up to using the controllable Bee-Bots which includes writing a program to control a character, testing algorithms and finally debug a given algorithm.	In this topic, the children will look at a range of technology and recognise the chronological changes that have happened over time. This is reinforced through our overarching topic "Old Toys" as we look into how the materials have developed in recent years. This will run parallel to technology over the years. The children will have some hands on opportunities to explore old and new technology and recognise the main differences amongst these.	A key aspect of the Computing curriculum is for children to understand how important it is for them to stay safe online. This is explained to the children using Smartie the Penguin. The story gives opportunities for the children to recognise what dangers they could encounter and discuss what they could do about it. Smartie even teaches us a catchy song to help us with this at home!
Sticky Knowledge				
How to use technology purposefully to create, organise, store, manipulate and retrieve digital content.	How to use technology purposefully to create, organise, store, manipulate and retrieve digital content	How to use logical reasoning to predict the behaviour of simple programs. How to understand programs executed by following precise and unambiguous instructions. Create and debug simple programs.	How to recognise common uses of technology beyond the school	How to 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
Sticky Vocabulary				
Brush, tools, fill, shapes, paint, image, focus, record, return, space, sound, sound effect,	Photograph, sort, group, video, sound, match, pictogram, tally, film, image, photograph, label,	Sequence, program, control, distance, direction, turn, predict, precise, algorithm, debug, instruction, forward, backward, right, left, whole turn, half turn, order, remote controlled, programmable, button, icon	Keyboard, screen, display, technology, computer, power, plug, lead, plug socket, battery, speaker, microphone, computer, laptop, mobile phone,	Rules, personal, private, website, password, online, website, internet, technology, information, favourite, hyperlink, link, discussion,
Skills				
Use different brushes and tools (including fill and shapes) in a paint program to create pictures.	Take observational photographs to find out about something. Use video and sound recording devices to record data to answer questions.	Follow and give instructions using forward, backward and whole, half, quarter and three quarter turns.	Recognise where technology is used at home and at school. Know that there is a range of technology used at home and at school.	Know some ways to stay safe online and who to tell if they have a problem

<p>Take a range of digital images and choose the best focused to share with an audience.</p> <p>Record sounds and their voice on digital devices for a specific purpose.</p> <p>Write sentences using a word processing program, using index fingers on a keyboard, spaces between words, return / enter to start a new line and backspace to delete as they go.</p> <p>Add content to a page by selecting from an image and word bank and save their work.</p> <p>Be supported to film something and watch it back.</p> <p>Contribute ideas to an online discussion.</p>	<p>Sort and group pictures and objects by given and own criteria in a number of different ways.</p> <p>Match pictures and grouped objects to name labels.</p> <p>Ask questions to show what they want to find out.</p> <p>Record information using tallying and tables.</p> <p>Contribute to creating a pictogram.</p> <p>Create their own pictogram.</p> <p>Answer questions about a pictogram by counting.</p>	<p>Control programmable toys using direction and turn and plan and test a sequence of instructions.</p> <p>Predict the effect of a given instruction on a programmable toy and debug a sequence of instructions given to a programmable toy by testing.</p> <p>Write a program to control a character to move on screen and plan and test an algorithm.</p> <p>Write an Algorithm</p> <p>Debug a given algorithm.</p>	<p>Describe some of the benefits with using technology at home and school.</p> <p>Identify parts of a computer and what they are for.</p> <p>Describe some of the dangers of using technology.</p> <p>Know how the use of technology at home and at school have changed over time.</p> <p>Know about the types of technology that can be used to communicate.</p>	<p>Know that personal information should not be shared online and what to do if they are asked for it.</p> <p>Know some ways that people can communicate online and how to be a good friend online.</p> <p>Know what to do if someone is mean to them online.</p> <p>Know that you do not always know who you are talking to online.</p> <p>6. Know that some websites are safe to visit and what to do if they find an unsafe site.</p>
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Year 2

Media	Data Handling	Programming	Impact of Technology	Online Safety
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Overview

<p>For our media topic, Traditional Tales will facilitate the children’s learning. They will use technology purposefully to create, organise, store, manipulate and retrieve digital content. We will begin by analysing media in stories and cartoons and throughout the term, the children will learn to create their own media.</p>	<p>A key aspect of data handling is creating a branching database. This is completed in the Minibeast topic so children learn to ask questions about each minibeast and organise them into groups. Children also learn about the different ways data is presented such as tables, pictograms and bar charts which interlinks with the maths objectives for Year 2.</p>	<p>When children learn to program they will control a device using sequence of directions, debug and test a sequence of instructions. They will also edit an algorithm to achieve a different outcome. The children will use the programming website ‘J2Code’ and use probots to follow the algorithms they create.</p>	<p>In this topic, Pine Class learn to recognise common uses of technology beyond the school. They will discuss what devices might be used such as digital cameras, interactive whiteboards, sat navs and laptops and what they do.</p>	<p>During this term, the children will learn to stay safe online by choosing websites that are good for them to visit and avoid sites that are not appropriate. They also learn that they leave a digital footprint when using the internet, when researching online. They also begin to learn about what online bullying looks like and what they should do if they feel this is happening.</p>
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Sticky Knowledge

<p>How to use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>How to use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>How to use logical reasoning to predict the behaviour of simple programs.</p> <p>How to understand programs execute by following precise and unambiguous instructions.</p> <p>Create and debug simple programs.</p>	<p>How to recognise common uses of technology beyond the school</p>	<p>How 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</p>
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Sticky Vocabulary

Picture, tools, repeating patterns, image, sound, shift, caps lock, capital, edit, arrow, text, backspace, delete	Data, chart, graph, branching database, question, pictogram, sort, image, photographs	predict, debug, program, instructions,	Keyboard, screen, display, technology, computer, power, plug, lead, plug socket, battery, internet, web browser, hyperlink, menu, search, browser, Google Chrome, Safari, Internet Explorer, Skype, email, telephone,	Rules, personal, private, website, password, online, website, internet, technology, information, favourite, hyperlink, link, discussion,
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Skills

<p>Use a range of tools in a paint program to mix colour and create pictures and repeating patterns. Plan and take digital images considering framing of the image. Create sounds, narration and music, re-recording to improve them where necessary. Write sentences with a word processing program using shift and caps lock for capitals and changing the font style, size and colour. Retrieve their documents and edit and add to them using arrow keys to move around text and backspace and delete to correct text. Be supported to work in a group to create an animation of a familiar story. Know that there are different methods of online communication and publish something online that parents can comment on.</p>	<p>Think about what information they will need to collect to answer questions Ask questions that they want to find the answers to including questions that can be answered yes no Collect data in a variety of ways including digital microscopes to capture images Use data to create charts and graphs Answer questions from charts and graphs Create decision trees using objects or photographs Explore a branching database Save their data and retrieve it Find information from different sources such as web sites</p>	<p>Plan and enter a sequence of instructions on a floor robot specifying distance and turn to achieve a given outcome. Debug a sequence of instructions. Understand the term sequence. Plan and test a sequence using distance and turn instructions to achieve a given algorithm. Find an alternative algorithm to one already given. Debug a program explaining why it needs to be changed. Edit a given algorithm to achieve a different outcome. Replicate an algorithm using programming software and debug. Write an algorithm to produce a shape. Use repeat in a real life context. Predict what a given algorithm will do and test their predictions by creating a program using it.</p>	<p>Be able to describe what a device needs in order to work Know about the different types of device that can access the internet and the different ways they are used Know how technology supports people in their daily lives Know how technology is used in some jobs Know what sort of information can be found on web sites and how this is a benefit to people Know how people can be contacted to get help online and that this has changed over time</p>	<p>Know what to look for in a website that will help to keep them safe Know that the information they put online leaves a 'digital footprint' Know what information is safe to share and what is personal and should not be shared online Know that not all websites are safe for them to visit and know some ways they can identify safe and unsafe websites Know how to avoid inappropriate websites by using safer searching Know how to communicate online appropriately and identify when online communication is inappropriate and what to do if this happens Identify the features and advantages that help you to keep safe in different types of online communication - link to media unit</p>
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Year 3

Media	Data Handling	Programming	Impact of Technology	Online Safety
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Overview

<p>In this unit, the children will be taught, and have opportunity, to use Microsoft word as a new programme to create and change media. They will begin by focusing on opening, typing and saving their files. This will progress to editing an individual photograph using word</p>	<p>The children will use software such as J2 code and simple Microsoft functions to understand how Data can be gathered, processed and presented in different ways. Data will be collected from subjects such as PE, Science and Geography</p>	<p>The children will begin to use programming tools and software such as beebots, probots and Textease turtle to create instructions for drawing shapes and images. The children will move onto using programmes such as Blockly Maze and Scratch, exploring how repeat instructions can be given in different</p>	<p>In this unit, the children will understand how technology has progressed over time, appreciating that devices they use know did not exist in the past. The children will then explore 'simulations' understanding how they work and their purpose. The</p>	<p>In this unit, the children will be taught how to consider their own and others safety when online and using devices. They will explore how to create safe and effective passwords. This will develop to understanding how people connect in online communities, recognising</p>
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features. The children will then edit and save changes to the same image multiple times before taking their own images on the I pads and then editing in word once on the computers.	and shown in charts, databases (branching and spreadsheets). The children will be encouraged to discuss and analyse their data once produced.	programmes. Following initial exploration, the children will then explore scratch in greater detail by understanding the algorithms needed for movement and sound. This will be developed in different formats such as football and racing games.	children will be provided with opportunities to use differing simulations and understand the changes they make are known as 'Variables'	the positive and negative elements that can occur from this. They will be encouraged to consider how online communication can vary from real-life and this might make us feel. Finally, the children will explore how they use technology and the personal impact (positive and negative) of this.
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Sticky Knowledge

How to 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	How to 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.	How to design, write and debug programs that accomplish specific goals. How to solve problems by decomposing them into smaller parts. How to use sequence, selection, and repetition in programs.	How to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts How to use sequence, selection, and repetition in programs; work with variables and various forms of input and output	How to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
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Sticky Vocabulary

Digital image, media, paint package, crop, import, tools, effect, edit, font, style, size, colour.	Database, branding database data, data collection, data logger	Predict, sequence, sprite, movement, direction, position, debug, algorithm	Variable, simulation, test, predict, design, option, choice	Password, protect, communicate, internet, online, community, respectful, tone, edit, email, letter, header, greeting, body, subject line,
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Skills

Create pictures using a range of tools and effects such as blur, diffuse, darken, reflect and repeats. Take digital images using zoom and use effects to edit them. Record sounds and voices and compose music and use tools to add effects to recordings and compositions. Use all fingers to create text based documents incorporating images selecting appropriate fonts, size and colour for a purpose and emphasis. Use bold, underline and italics for emphasis. Edit text by highlighting, to change fonts, size, and colour and save their changes.	Use a digital microscope to find detailed information. Find information from a database to answer straight forward questions. Add to a database. Answer questions using information in a branching database. Ask their own questions and recognise those which have yes /no answers. Create their own branching database to answer questions. Record and present data in drawings, pictograms, bar charts and tables. Answer one-step and two-step questions from collected data.	Use logo type commands to control a floor robot. Understand how instructions given in a logo program relate to instructions given to a programmable robot / toy Solve problems with a floor robot and replicate their solutions on screen. Use logo commands to write an algorithm and program e.g. to draw regular shapes. Explain what a given program does in a logo program and using a visual programming language. Debug a program written in logo commands and using a visual programming language. Use repeat in logo to write a program. Test and debug given programs.	Know what a simulation is and why they are used. Know that physical systems can be simulated. Know that simulations can be different to a real life situation. Know that simulations can be used to test a prediction. Know that simulations allow people to explore a variety of options Know that changing options in a simulation may have different outcomes. Describe some ways in which simulations have an impact on our lives.	Know the benefits of using passwords and strategies for creating strong and secure passwords Know that people can connect through the internet and that this can create an online community Know that some websites are designed to encourage people to buy something and what features are used on sites to do this know the differences between communicating in person and online and how to write clear and respectful messages Communicate effectively by email considering the purpose and
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6. Contribute their own ideas to a wiki and use resources from a wiki to support planning for a project Use a spell checker.	Use a data logger to monitor changes and describe the findings.	Write an algorithm using Logo and using a visual programming language to achieve an outcome. Explain how an algorithm solves a problem. Write a program in which an object is used to trigger an action.	Know that simulations produce information that needs to be analysed.	audience and adapting the tone accordingly Know that you can pay for things online including in-app purchases and how to avoid incurring costs Identify some dangers of using mobile technology and how to keep safe
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Year 4

Media	Data Handling	Programming	Impact of Technology	Online Safety
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Overview

<p>In this unit the children will create a photo story using a variety of software. They create the layout of a comic strip using photos in a desktop publisher. The children edit and enhance photos and text for presentation. Using the program, they will arrange and layer objects, including titles and backgrounds. The children will then add and arrange photos to a movie presentation, with animation effects.</p>	<p>Children use databases and the program 'Textease Branch' in this unit. They are introduced to a database branching program allowing the children to compose a tree diagram to sort objects and allow others to identify objects by following and answering simple questions. The children then create a branching database using mini-beasts. They also learn how to use and debug their own branching database.</p>	<p>In this unit, children use the Logo programme. They will learn how to create and debug an algorithm to create a procedure. Using Septos they draw shapes and explore filling areas with colour. They also create and debug an algorithm to produce text as well as creating arcs. Finally, they will use their knowledge to create a game.</p>	<p>Children learn to recognise that different search terms give different results as well as identify factors that affect the ranking of search results. They will use strategies which improve results when searching online. They learn how to look for citations online as well as write a citation. Children will recognise why some websites ask for registration information. They will also learn why and how data can be stored.</p>	<p>In this unit, children learn how to be safe when using the internet. They also identify which information to keep safe on-line as well as know how to respond to hurtful messages or comments online. Children will recognise and explain what digital citizenship is. In this unit, children look at online gaming and recognise the dangers and negative effect that it can have.</p>
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Sticky Knowledge

<p>How to 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.</p>	<p>How to 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.</p>	<p>How to use logical reasoning to predict the behaviour of simple programs How to understand programs executed by following precise and unambiguous instructions How to create and debug simple programs</p>	<p>How to use search technologies effectively, appreciate and be discerning in evaluating digital content</p>	<p>How to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>
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Sticky Vocabulary

<p>Digital image, media, paint package, crop, import, tools, effect, edit, font, style, size, colour.</p>	<p>Data, chart, graph, branching database, question, numerical, list, text, field, search, sort, data logger.</p>	<p>Repeat, procedure, algorithm, logo, sequence, program, precise, instructions</p>	<p>search engine, boolean, website, file, folder, ranking, reliability, URL, file path.</p>	<p>Responsibility, community, digital citizen, identity theft, personal information, private information, register, keyword, precise,</p>
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Skills

<p>Create pictures by choosing from a range of tools and effects and by</p>	<p>Ask questions about a population and identify data to be collected to answer them</p>	<p>Test and improve given programs. Improve efficiency in programs by</p>	<p>Describe the features of a search engine that help you to search.*</p>	<p>Know how to be responsible and respectful digital citizens in offline and online communities</p>
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<p>copying and pasting sections of a picture.</p> <p>Take digital images, edit using camera effects and crop them</p> <p>Edit sound and music files using copy and paste and adding effects.</p> <p>Create text based documents using appropriate layout for a purpose including use of bullet points, numbering, indenting and columns and selecting appropriate fonts.</p> <p>Use right click to correct spellings, look up words and find synonyms</p> <p>Script and plan a film considering shot types and then film it.</p> <p>Contribute to a blog and know how information in a blog is organised.</p>	<p>Plan and create a database</p> <p>Distinguish between different types of data in a database field such as numerical, text, list</p> <p>Search and sort data in a database to answer questions</p> <p>Know how to identify inaccurate data</p> <p>Present data appropriately for a purpose and audience</p> <p>Use a data logger and analyse the findings.</p>	<p>comparing different solutions and by using repeat.</p> <p>Write and edit programs using logo commands.</p> <p>Write procedures using logo e.g. to draw letters, polygons and other shapes.</p> <p>Use procedures as part of a program.</p> <p>Define variables e.g. to draw shapes on screen with logo and to create a score in a game.</p> <p>Plan and write a program using a flow chart structure.</p> <p>Use sensors to 'trigger' an action e.g. touching a wall.</p> <p>Write an algorithm and then create a program that will use a simple selection command for a game.</p>	<p>Know how to select an appropriate search tool.</p> <p>Describe how to use a search engine effectively (to get best results).</p> <p>Know why search results are ranked differently.</p> <p>Know how to check the reliability of a web site.</p> <p>Know about file structure, naming and organisation and the implications for finding resources.</p> <p>Know about the different places data can be stored and the benefits and issues of this.</p>	<p>Know how to protect themselves from identity theft by considering the information they share online</p> <p>3. Know that websites use the information you post online to target advertising and how to manage this (relative to what you post/search online).</p> <p>Know about the impact that hurtful online messages can have and how to deal with cyberbullying and support each other.</p> <p>Know how to compare and refine keyword searches and explain their results</p> <p>Know that the type of content you post on line can influence how people see you and the implications for generating positive content</p> <p>Know about the dangers of online gaming and how to keep safe</p>
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Year 5

Media	Data Handling	Programming	Impact of Technology	Online Safety
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Overview

<p>This unit links to our Rainforests topic. The children initially present their knowledge about the rainforest using Microsoft Office software (Word, PowerPoint). We then move onto creating animations of rainforest animals. The children will create and control graphics and audio to create a stop frame animation.</p>	<p>This topic is taught cross-curricularly alongside our Maths data handling and measurement units. The children learn how to use databases (such as Excel) to record and analyse data they have collected. They learn how to sort and filter data and to present their findings.</p>	<p>We learn to use Flowol in this unit to programme and debug computer programmes. First, we learn how to simulate zebra crossing lights, adding a loop to the programme. We then problem solve to work out why programmes aren't working and learn how to edit programmes to suit the needs of a design brief.</p>	<p>In this unit, the children learn how the internet works, watching informative videos and using role play to bring it to life! Children learn the different uses of the internet, the function of cookies and they discuss their opinions about targeted advertising. Finally, we learn how the internet can be a tool to support real life issues linked to our topic of natural disasters, for example weather forecasts and the monitoring of tectonic activity and earthquakes.</p>	<p>Following Safer Internet Day, the children learn how to keep themselves safe online and what to do if they need to report a problem online. We look at a range of potential dangerous scenarios and discuss what the consequences of different actions could be. The children will learn to distinguish between spam and trusted materials. Children will also learn about the positives and negatives of social media, plagiarism and how to protect devices from harm. In term 5, as part of our Jigsaw PSHE curriculum we also focus on our relationship with the internet and cover issues such as screen time, grooming and cyber-bullying.</p>
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Sticky Knowledge

<p>How to 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</p>	<p>How to 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.</p>	<p>How to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts How to use sequence, selection, and repetition in programs; work with variables and various forms of input and output How to use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<p>How to understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web</p>	<p>How to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>
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Sticky Vocabulary

<p>Story board, layout, format, track changes, animation, stop frame, edit, blog, wiki, sound, audio file, import, sound effect, track, graphic, hyperlink.</p>	<p>Data, chart, graph, branching database, question, field, numerical data, spreadsheet, cell, row, column, format,</p>	<p>Input, output, program, flow chart, repetition, selection, sequence, debug, switch, sensor, variable, control, simulation</p>	<p>network, cookie, WAN (wide area network) LAN (local area network), wiki, blog, discussion, survey,</p>	<p>Spam, junk mail</p>
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Skills

<p>Create pictures using a wide range of effects and tools in a paint program to create images designed for a specific purpose and audience. Use a variety of tools and effects to edit sounds and music for a specific purpose and audience. Create text based multimedia documents selecting an appropriate layout, fonts and tools for a purpose and audience. Script and plan an animation for a specific purpose using green screen where appropriate. Compare different online communications methods and explain how they are similar and different. Use word processing software to design and format for specific purposes.</p>	<p>Identify data required to answer specific questions. Present data using different graphs and charts in a spreadsheet. Collect and record information using databases and spreadsheets. Complete complex searches (e.g. using and/or; \leq / \geq) of data in databases and online data sources. Answer questions by identifying data that can be collected using a data logger and interpreting the findings. Plan investigations which make use of a data logger to collect data; analyse findings and present outcomes.</p>	<p>Plan, debug and test algorithms and programs. Use looping and repeat until a condition is met in programs. Group commands to create procedures or sub-routines. Plan, write, debug and test programs using selection structures. Write programs in which an input controls an output and edit to give a different output. Create a program to simulate and control a real life system. Control on screen mimics and physical devices. Use 4 quadrants to identify position in a visual programming language. Use understanding of internal angles to program more complex shapes on screen. Write a program which uses more than one variable. Use a varying sensor as an input to trigger action in a program e.g. temperature or light.</p>	<p>Know about computer networks and how they work Know how they can provide multiple services Know that data is used to target services and information Know about the benefits of different types of online communication and collaboration tools Know how to select the most appropriate tool for a purpose Know how online communication and collaboration impacts on people in their life and work</p>	<p>Know about the consequences online behaviour can have Know what spam is, the forms it takes and strategies for dealing with it Know that websites try to influence our views and recognise how to distinguish between fact and opinion Identify how social networking sites share use information and the risks of this know what plagiarism is and how and when they can use the work of others Know how to protect devices from harm</p>
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Year 6

Media	Data Handling	Programming	Impact of Technology	Online Safety
Overview				
<p>This unit links to our WWII topic. Alongside the mentioned skills, students will learn about the development of computing during and after the conflict. Take and edit digital images in different ways for different purposes and audiences. Use a variety of tools and effects to change sounds and music in order to have a different impact on an audience. Create and amend text based documents selecting an appropriate layout, fonts and tools for contrasting purposes and audience. Incorporate hyperlinks and transitions in documents and presentations. Plan film or animation for a specific purpose using green screen where appropriate and aiming to have a specific impact on a specified audience. Choose an online communication mechanism for a specific purpose and explain their reasons for choosing it.</p>	<p>This unit links well with our fundraising topic. As students will be responsible for their own funds throughout the term, it is important for the class to learn and understand data and how it can be analysed. Complete data collection and analysis. Select, collect, check accuracy and analyse the data through selecting appropriate data manipulation tools, and present results. Solve problems by manipulating and interrogating data and present their findings. Question the integrity of data and identify where data may be compromised.</p>	<p>Over the course of this unit, students will engage in learning that complements our topic of the Tudors. During this period, there were many aspects of life which needed established procedures in order to be successful. We will compare how older societies used data and algorithms for life without using computers in order to gain familiarity and understanding for the modern day. Plan an algorithm using flow chart notation and then use it to write a program. Write a program from a given algorithm to achieve a specified outcome. Use the program to test and improve the original algorithm. Control on screen mimics and physical devices using more than one input and predict the outputs. Use selection structures in a program. Create variables in a program. Use sensors to measure an input in order to trigger a sequence and procedure. Edit programs using procedures / subroutines to improve efficiency.</p>	<p>Our topic of 'The World we Live in,' links to this topic well as the impact of technology has widespread effects on society as a whole. It is imperative for children to be confident with technological knowledge whilst obtaining the ability to navigate websites and recognize their features. This will consolidate their knowledge of the world and enable students to understand how advancements in technology have helped society also advance. Know how to find out who information on a web page belongs to. Know how web sites are designed to have an impact on the audience. Be able to evaluate web sites and the impact they are designed to have on an audience. Know some ways to evaluate the reliability of web content. Know about intellectual property and copyright. Know how web pages are created and published</p>	<p>Being safe is an important part of school life. It is essential for students to be aware of the potential dangers of an increasing online presence. The internet is fantastic for developing a range of personal skills and relationships. However, students must be able to recognise the genuine and separate it from unrealistic or even dangerous access points. Overall, this unit will provide the class with a good knowledge of how to be and remain safe whilst accessing the internet. Using ICT skills to learn about how the internet is great for developing relationships whilst acknowledging the need to not share information. They will explore the notion of responsibility by creating a digital comic based on how to solve problems based on poor digital citizenship. Students will understand how websites preserve personal information and how to identify secure sites by looking at what a properly secure website looks like.</p> <p>Pupils will explore cyberbullying and the similarities and differences to in person bullying. They will also learn about strategies for dealing with cyberbullying.</p> <p>Students will explore how the media influence our ideas of what it means to be a girl or boy. They will explore messages about gender identity.</p>

Sticky Knowledge

How to 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.	How to 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.	How to use logical reasoning to predict the behaviour of simple programs * Understand programs execute by following precise and unambiguous instructions * Create and debug simple programs	How to 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.	How to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
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Sticky Vocabulary

Film, cut, copy, paste, edit, audience, trim, effect.	Filter, sort, formula, data, mean, average, spreadsheet, inaccurate, field, variable, search	Sequence, program, control, distance, direction, turn, predict, precise, algorithm, debug, repeat, selection, subroutine	Call to action, navigation, cookies, privacy, data protection, terms and conditions, HTML tags, HTML, URL, domain, hypertext markup language,	Spam, junk mail
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Skills

<p>Take and edit digital images in different ways for different purposes and audiences.</p> <p>Use a variety of tools and effects to change sounds and music in order to have a different impact on an audience.</p> <p>Create and amend text based documents selecting an appropriate layout, fonts and tools for contrasting purposes and audience.</p> <p>Incorporate hyperlinks and transitions in documents and presentations.</p> <p>Plan film or animation for a specific purpose using green screen where appropriate and aiming to have a specific impact on a specified audience.</p> <p>Choose an online communication mechanism for a specific purpose and explain their reasons for choosing it.</p>	<p>Complete data collection and analysis.</p> <p>Select, collect, check accuracy and analyse the data through selecting appropriate data manipulation tools, and present results.</p> <p>Solve problems by manipulating and interrogating data and present their findings.</p> <p>Question the integrity of data and identify where data may be compromised.</p>	<p>Plan an algorithm using flow chart notation and then use it to write a program.</p> <p>Write a program from a given algorithm to achieve a specified outcome. Use the program to test and improve the original algorithm.</p> <p>Control on screen mimics and physical devices using more than one input and predict the outputs.</p> <p>Use selection structures in a program.</p> <p>Create variables in a program.</p> <p>Use sensors to measure an input in order to trigger a sequence and procedure.</p> <p>Edit programs using procedures / subroutines to improve efficiency.</p>	<p>Know how to find out who information on a web page belongs to</p> <p>Know how web sites are designed to have an impact on the audience</p> <p>Be able to evaluate web sites and the impact they are designed to have on an audience</p> <p>Know some ways to evaluate the reliability of web content</p> <p>Know about intellectual property and copyright</p> <p>6. Know how web pages are created and published</p>	<p>Know about the consequences online behaviour can have</p> <p>Know what spam is, the forms it takes and strategies for dealing with it</p> <p>Know that websites try to influence our views and recognise how to distinguish between fact and opinion</p> <p>Identify how social networking sites share use information and the risks of this</p> <p>know what plagiarism is and how and when they can use the work of others</p> <p>Know how to protect devices from harm</p>
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