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| Year Group | E-Safety | Coding/Programming | Communication | Multimedia |
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| Reception | With support, children should understand that they need tell an adult if they encounter something which makes them feel uncomfortable. With adult supervision play appropriate games on the Internet. | To use beebots and remote control vehicles.To make the beebot move from A to B. | 2Create a story and basic typing-first and last name.To use a computer programme to draw a picture.  | To use a mouse to rearrange objects and pictures on a screen. Recognise text, images and sound when using ICT. Use paint programmes to create a picture. Use a camera or sound recorder to collect photos or sound. |
| Year 1 | To be able to ask for help and know who to tell if something unexpected happens.Understand they need to follow certain rules to remain safe when visiting | Coding-Create and debug simple programs for a beebot to follow a path. Understand positional language forward, backwards, up and down etc2Create s story | To use google maps to explore our local area. To recognise uses of technology in their homes and in their community. To understand that there are online tools that can help them create and communicate. | Story telling-2paint a picture, draw and type simple text to retell a story.To use technology purposefully to create, organise,store,manipulate and retrieve digital content. Record their own voice and play it back to an audience. Create sounds and simple music phrases using ICT tools. Use index fingers on a keyboard to build words and sentences. Know how and when to use the space bar (thumb). |
| Year 2 |  To understand how to use the internet safely and understand what to share and what not to share online. Stay safe online by choosing websites that are good for them to visit & not inappropriate sitesExplore what cyber-bullying means & what to do when they encounter it | To use logical reasoning to predict the behaviour of simple programs. Start to predict outcomes of a set of instructions. Understand what a algorithm is. Understand that algorithms require precise instructions.  | Word processing use technology purposefully to create, organise, store, manipulate and retrieve digital content, recognise common uses of information technology beyond school. Collect data, generate graphs and charts to find answer. | Use an increasing variety of tools and effects in paint programs and talk about their choices. Use templates to make electronic books individually and in pairsExplore the effects of sound and music in animation and video. Create own documents, adding text and images. Use keyboard to enter text (index fingers left & right hand).Know when and how to use the RETURN/ ENTER key. Use SHIFT & CAPS LOCK to enter capital letters. Use DELETE & BACKSPACE buttons to correct text.Create sentences, SAVE & edit later |
| Year 3 | Children should start to reflect critically on the information that they find online, developing an understanding of what is genuine and what is not.Agree sensible e-safety rules for the classroomChoose a secure password for age-appropriate websites | To start using coding in scratch and espresso. Observe the effect of changing variables when in algorithms. Give an on-screen robot directional-instructions. Work with various forms of input and output using an on-screen program.  | To use ICT to research a topic theme. To talk about the parts of a computer. To record data in a variety of ways. Present data for others. To know appropriate tools to communicate on-line.  | Explore & begin to evaluate the use of multimedia to enhance communicationCreate & begin to edit presentation documents & text, experimenting with fonts, size, colour, alignment for emphasis & effectUse a range of effects in art programs including brush sizes, repeats, reflectionsExplore the use of video, animation & green screeningUse ICT tools to create musical phrasesAmend text & save changes.Use individual fingers to input text & use SHIFT key to type charactersAmend text by highlighting & using SELECT/ DELETE & COPY/ PASTELook at own work & consider how it can be improved for effectiveness |
| Year 4 | Children should know what to do if they are sent something suspicious and deepen their understanding of what to look out for before opening things.Agree sensible e-safety rules for the classroomChoose a secure password for age-appropriate websites | To use statements within a code. Control an on-screen robot with directional instructions. Make accurate predictions of the outcomes of a program made.  | Talk about the school network & the different resources they can access, including the Internet. Frame questions & identify key words to search for information on the InternetConsider reliability of information & ways it may influence you. Check who the owner is before copying photos, clipart or text. Plan and create a database to answer questionsIdentify different types of dataAsk questions carrying out simple searches on a database | Explore how multimedia can create atmosphere & appeal to different audiencesBe confident in creating & modifying text & presentation documents to achieve a specific purposeUse art programs & online tools to modify photos for a specific purpose using a range of effectsExplore the use of video, animation, & green screening for a specific audienceUse ICT tools to create music phrases for a specific purposeUse a keyboard effectively, including the use of keyboard shortcutsUse font sizes & effects such as bullet points appropriatelyKnow how to use a spell checkLook at their own, and a friend’s work & provide feedback that is constructive & specific |
| Year 5 | Children will understand what information they require permission for to share online and what is safe to share online.Agree sensible e-safety rules for the classroomDiscuss their own personal use of the Internet and choices they make Discuss how to protect devices from virus threats | To code a variable in scratch. Espresso.Combine sequences of instructions to control input and output devices. Develop simple algorithms that control a series of events that accomplish specific goals. Adapt and refine sequences of instructions to improve their work.  | Identify different parts of computing devices.Identify different parts of the Internet. Choose appropriate tools for communication and collaboration and use them responsibly. Use effective strategies to search with appropriate search enginesTalk about the different elements on web pagesFind out who the information presented on a webpage belongs to. Collect and record information using spreadsheets and databases. | Select an appropriate ICT or online tool to create and share ideas.Explore the effects of multimedia (photos, video, sound) in a presentation or video and show how they can be modifiedDevelop skills using transitions and hyperlinks to enhance the stricture of presentationsUse a wide range of effects in art programs and online tools, discussing the choices made and their effectivenessKnow how to use text and video editing tools in programs to refine their workUse online tools to create and share presentations and films |
| Year 6 | Children should understand and be able to explain what a digital footprint is and why it is.Agree sensible e-safety rules for the classroomDiscuss their own personal use of the Internet and choices they make Discuss how to protect devices from virus threats | Check, refine and detect errors in a program and debug it.With increased independence refine algorithms that control a series of events that accomplish specific goals (e.g. controlling or simulating physical systems. Plan and refine different scenarios for controlled devices.Use code to create a game in scratch or espresso..  | Describe different services provided by the Internet & how information moves around the Internet. Describe different parts of a computing device & how it connects to the Internet. Connect a computing device to a keyboard, mouse or printerIdentify appropriate forms of online communication for different audiences. Acknowledge who resources belong to that they have found on the internet. Use the whole data process – generate, process, interpret, store, and present information – realising the need for accuracy and checking plausibility | Identify the purpose for selecting an appropriate online toolDiscuss audience, atmosphere and structure of a presentation or videoCollect information and media from a range of sources (considering copyright issues) into a presentation for a specific audienceUse sound, images, text, transitions, hyperlinks and HTML code effectively in presentationsStore presentations and videos online where they can be accessed by themselves and shared with othersEvaluate the effectiveness of their own work and the work of others |