

COMPUTING SKILLS PROGRESSION

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| DIGITAL LITERACY AND E-SAFETY | | <p>Keep my password private.</p> <p>Tell you what personal information is.</p> <p>Tell an adult when I see something unexpected or worrying online.</p> <p>Talk about why it's important to be kind and polite.</p> <p>Recognise an age appropriate website.</p> <p>Agree and follow sensible e-Safety rules.</p> <p>Begin to use a keyboard, mouse, trackpad and touchscreen.</p> | <p>Talk about what makes a secure password and why they are important. Protect my personal information when I do different things online.</p> <p>Use the safety features of websites as well as reporting concerns to an adult.</p> <p>Recognise websites and games appropriate for my age.</p> <p>Make good choices about how long I spend online.</p> <p>Ask an adult before downloading files and games from the Internet.</p> | <p>Choose a secure password when I am using a website.</p> <p>Talk about the ways to protect myself and my friends from harm online.</p> <p>Use the safety features of websites as well as reporting concerns to an adult.</p> <p>Know that anything I post online can be seen by others.</p> <p>Choose websites and games that are appropriate for my age.</p> <p>Help my friends make good choices about the time they spend online.</p> | <p>Choose a secure password when I am using a website.</p> <p>Talk about the ways to protect myself and my friends from harm online.</p> <p>Use the safety features of websites as well as reporting concerns to an adult.</p> <p>Know that anything I post online can be seen by others. Choose websites and games that are appropriate for my age.</p> <p>Help my friends make good choices about the time they spend online.</p> | <p>Protect my password and other personal information.</p> <p>Explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult.</p> <p>Know that anything I post online can be seen, used and may affect others.</p> <p>Talk about the dangers of spending too long online or playing a game.</p> <p>Explain the importance of communicating kindly and respectfully.</p> | <p>Protect my password and other personal information.</p> <p>Explain the consequences of sharing too much about myself online.</p> <p>Support my friends to protect themselves and make good choices online, including reporting concerns to an adult.</p> <p>Explain the consequences of spending too much time online or on a game.</p> <p>Explain the consequences to myself and others of not communicating kindly and respectfully. Protect my computer or device from harm on the Internet.</p> |

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| | | | <p>Post positive comments online Understand why it is important for me to use and view only the apps, websites or films that are appropriate to my age</p> <p>Use a keyboard, mouse, trackpad and touchscreen with more confidence.</p> | <p>Talk about why I need to ask a trusted adult before downloading files and games from the Internet.</p> <p>Comment positively and respectfully online.</p> <p>Understand why it is important for me to use and view only the apps, websites or films that are appropriate to my age</p> <p>Use a keyboard, mouse, trackpad and touchscreen confidently</p> | <p>Talk about why I need to ask a trusted adult before downloading files and games from the Internet.</p> <p>Comment positively and respectfully online.</p> <p>Understand why it is important for me to use and view only the apps, websites or films that are appropriate to my age</p> <p>Use a keyboard, mouse, trackpad and touchscreen confidently</p> | <p>Discuss the importance of choosing an age-appropriate website or game.</p> <p>Explain why I need to protect my computer or device from harm.</p> <p>Know which resources on the Internet download and use.</p> <p>Understand why it is important for me to use and view only the apps, websites or films that are appropriate to my age</p> <p>Use a mouse, trackpad and touchscreen confidently and begin to touch type on a keyboard.</p> | <p>Understand why it is important for me to use and view only the apps, websites or films that are appropriate to my age.</p> <p>Use a mouse, trackpad and touchscreen confidently and can type on a keyboard at a reasonable rate of speed and accuracy.</p> |
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| PROGRAMMING | | <p>Give instructions to my friend and follow their instructions to move around.</p> <p>Describe what happens when I press buttons on a robot.</p> <p>Press the buttons in the correct order to make my robot do what I want.</p> <p>Describe what actions I will need to do to make something happen and begin to use the word algorithm.</p> <p>Begin to predict what will happen for a short sequence of instructions.</p> | <p>Give instructions to my friend (using forward, backward and turn) and physically follow their instructions.</p> <p>Tell you the order I need to do things to make something happen and talk about this as an algorithm.</p> <p>Program a robot or software to do a particular task.</p> <p>Begin to understand the vocabulary and importance of sequence and repetition.</p> <p>Look at my friend's program and tell you what will happen.</p> | <p>Break an open-ended problem up into smaller parts.</p> <p>Put programming commands into a sequence to achieve a specific outcome.</p> <p>Keep testing my program and can recognise when I need to debug it.</p> <p>Understand and can use basic selection and repetition in algorithms.</p> <p>Create and describe the algorithm I will need for a simple task.</p> <p>Detect a problem in an algorithm which could result in unsuccessful programming.</p> | <p>Use logical thinking to solve an open-ended problem by breaking it up into smaller parts.</p> <p>Understand and can use selection (as well as sequence and repetition) in algorithms and programming.</p> <p>Use inputs to determine or trigger an action within my program.</p> <p>Know that I need to keep testing my program while I am putting it together.</p> <p>Use a variety of tools to create a program.</p> <p>Recognise an error in a program and debug it.</p> <p>Recognise that an algorithm will help</p> | <p>Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program.</p> <p>Refine a procedure using repeat commands to improve a program.</p> <p>Understand and use variables within my programming.</p> <p>Use input to alter and affect my variables.</p> <p>Confidently use sequence, selection and repetition within my algorithms and programming.</p> | <p>Deconstruct a problem into smaller steps, recognising similarities to solutions used before.</p> <p>Explain and program each of the steps in my algorithm.</p> <p>Evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm.</p> <p>Recognise when I need to use a variable to achieve a required output.</p> <p>Use a variable and operators to stop a program (and understand why 'forever loops' can be inappropriate).</p> |

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| | | <p>Begin to use software/apps to create movement and patterns on a screen.</p> <p>Use the word debug when I correct mistakes when I program.</p> | <p>Use programming software to make objects move. Watch a program execute and spot where it goes wrong so that debug it.</p> | | <p>me to sequence more complex programs.</p> <p>Recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.</p> | <p>Design, build and program physical systems using inputs, process and outputs.</p> <p>Use logical reasoning to detect and debug mistakes in a program.</p> <p>Use logical thinking, imagination and creativity to extend a program.</p> | <p>Use different inputs (including sensors) to control a device or onscreen action and predict what will happen.</p> <p>Use logical reasoning to detect and correct errors in a algorithms and programs.</p> |
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| HANDLING DATA | | <p>Talk about the different ways in which information can be shown.</p> <p>Use technology to collect information, including photos, video and sound.</p> <p>Sort different kinds of information and present it to others.</p> <p>Add information to a pictograph and talk to you about what I have found out.</p> | <p>Talk about the different ways I use technology to collect information, including a camera, microscope or sound recorder.</p> <p>Make and save a chart or graph using the data I collect.</p> <p>Talk about the data that is shown in my chart or graph.</p> <p>Start to understand a branching database.</p> <p>Tell you what kind of information I could use to help me investigate a question.</p> | <p>Talk about the different ways data can be organised.</p> <p>Search a ready-made database to answer questions.</p> <p>Collect data help me answer a question.</p> <p>Add to a database.</p> <p>Make a branching database.</p> <p>Use a data logger to monitor changes and can talk about the information collected.</p> | <p>Organise data in different ways.</p> <p>Collect data and identify where it could be inaccurate.</p> <p>Plan, create and search a database to answer questions.</p> <p>Choose the best way to present data to my friends.</p> <p>Use a data logger to record and share my readings with my friends.</p> | <p>Use a spreadsheet and database to collect and record data.</p> <p>Choose an appropriate tool to help me collect data..</p> <p>Present data in an appropriate way.</p> <p>Search a database using different operators to refine my search.</p> <p>Talk about mistakes in data and suggest how it could be checked.</p> | <p>Plan the process needed to investigate the world around me.</p> <p>Select the most effective tool to collect data for my investigation.</p> <p>Check the data I collect for accuracy and plausibility.</p> <p>Interpret the data I collect.</p> <p>Present the data I collect in an appropriate way.</p> <p>Use the skills I have developed to interrogate a database.</p> |

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| MULTIMEDIA | | <p>Be creative with different technology tools.</p> <p>Use technology to create and present my ideas.</p> <p>Use the keyboard or a word bank on my device to enter text.</p> <p>Save information in a special place and retrieve it again.</p> | <p>Use technology to organise and present my ideas in different ways.</p> <p>Use the keyboard on my device to add, delete and space text for others to read.</p> <p>Tell you about an online tool that will help me to share my ideas with other people.</p> <p>Save and open files on the device I use.</p> | <p>Create different effects with different technology tools.</p> <p>Combine a mixture of text, graphics and sound to share my ideas and learning.</p> <p>Use appropriate keyboard commands to amend text on my device, including making use of a spellchecker.</p> <p>Evaluate my work and improve its effectiveness.</p> <p>Use an appropriate tool to share my work online.</p> | <p>Use photos, video and sound to create an atmosphere when presenting to different audiences.</p> <p>Confidently explore new media to extend what achieve.</p> <p>Change the appearance of text to increase its effectiveness.</p> <p>Create, modify and present documents for a particular purpose.</p> <p>Use a keyboard confidently and make use of a spellchecker to write and review my work.</p> <p>Use an appropriate tool to share my work and collaborate online.</p> | <p>Use text, photo, sound and video editing tools to refine my work.</p> <p>Use the skills I have already developed to create content using unfamiliar technology.</p> <p>Select, use and combine the appropriate technology tools to create effects that will have an impact on others.</p> <p>Select an appropriate online or offline tool to create and share ideas.</p> <p>Review and improve my own work and support others to</p> | <p>Talk about audience, atmosphere and structure when planning a particular outcome.</p> <p>Confidently identify the potential of unfamiliar technology to increase my creativity.</p> <p>Combine a range of media, recognising the contribution of each to achieve a particular outcome.</p> <p>Tell you why I select a particular online tool for a specific purpose.</p> <p>Be digitally discerning when evaluating the effectiveness of my own work and the work of others.</p> |

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| | | | | | Give constructive feedback to my friends to help them improve their work and refine my own work. | improve their work. | |
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| TECHNOLOGY IN OUR LIVES | | <p>Recognise the ways we use technology in our classroom.</p> <p>Recognise ways that technology is used in my home and community.</p> <p>Use links to websites to find information.</p> <p>Begin to identify some of the benefits of using technology.</p> | <p>Tell you why I use technology in the classroom.</p> <p>Tell you why I use technology in my home and community.</p> <p>Start to understand that other people have created the information I use.</p> <p>Identify benefits of using technology including finding information, creating and communicating.</p> <p>Talk about the differences between the Internet and things in the physical world.</p> | <p>Save and retrieve work on the Internet, the school network or my own device.</p> <p>Talk about the parts of a computer.</p> <p>Tell you ways to communicate with others online.</p> <p>Describe the World Wide Web as the part of the Internet that contains websites.</p> <p>Use search tools to find and use an appropriate website.</p> <p>Think about whether to use images that I find online in my own work.</p> | <p>Tell you whether a resource I am using is on the Internet, the school network or my own device.</p> <p>Identify key words to use when searching safely on the World Wide Web.</p> <p>Think about the reliability of information I read on the World Wide Web.</p> <p>Tell you how to check who owns photos, text and clipart.</p> <p>Create a hyperlink to a resource on the World Wide Web.</p> | <p>Describe different parts of the Internet.</p> <p>Use different online communication tools for different purposes.</p> <p>Use a search engine to find appropriate information and check its reliability.</p> <p>Recognise and evaluate different types of information I find on the World Wide Web.</p> <p>Describe the different parts of a webpage.</p> <p>Find out who the information on a webpage belongs to.</p> | <p>Tell you the Internet services I need to use for different purposes.</p> <p>Describe how information is transported on the Internet.</p> <p>Select an appropriate tool to communicate and collaborate online.</p> <p>Talk about the way search results are selected and ranked.</p> <p>Check the reliability of a website.</p> <p>Tell you about copyright and acknowledge the sources of information that I find online.</p> |