

2019-20	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Class 1 (R/Y1)						
Computing	In Reception, children build an awareness of technology and explore its uses. They select and use technology for particular purposes. Children use iPads, mechanical toys, programmable robots, digital cameras and a range of software to support their learning.					
Class 2 (Y1/2)						
Computing	<p>Online safety Pupils will learn what is a password and why should we keep them safe; what a digital avatar is and why it is better than a picture of yourself; the only person that can see your saved work is the teacher and yourself.</p> <p>Maze explorers To understand the functionality of the direction keys. To understand how to create and debug a set of instructions (algorithm). To use the additional direction keys as part of an algorithm. To understand how to change and extend the algorithm list. To</p>	<p>Questioning To learn about data handling tools that can give more information than pictograms. To use yes/no questions to separate information. To construct a binary tree to identify items. To use a database to answer more complex search questions. To search to find information.</p> <p>Online safety To know how to refine searches. To use digital technology to share work and communicate and</p>	<p>Animated story books To introduce e-books. To add animation to a story. To add sound to a story, including voice recording and music the children have composed. To work on a more complex story, including adding backgrounds and copying and pasting pages. To share e-books on a class display board.</p>	<p>Making To make music digitally. To explore, edit and combine sounds. To edit and refine composed music. To think about how music can be used to express feelings and create tunes which depict feelings. To upload a sound from a bank of sounds. To record and upload environmental sounds. To use these sounds to create tunes.</p> <p>Spreadsheets To use an image, lock, move cell, speak and count tools to make a counting machine. To learn how to copy and</p>	<p>Pictograms To understand that data can be represented in picture format. To contribute to a class pictogram. To use a pictogram to record the results of an experiment.</p>	<p>Presenting ideas To explore how a story can be presented in different ways. To make a quiz about a story or class topic. To make a fact file on a non-fiction topic. To make a presentation to the class.</p>

	create a longer algorithm for an activity. To set challenges for peers. To access peer challenges set by the teacher.	connect with others locally. To have some knowledge and understanding about sharing more globally on the Internet. To introduce Email as a communication tool. To understand how we should talk to others in an online situation. To open and send simple online communications in the form of email. To understand that information put online leaves a digital footprint or trail. To identify the steps that can be taken to keep personal data and hardware secure.		paste. To use the totalling tools. To use a spreadsheet for money calculations. To use the equals tool to check calculations. To collect data and produce a graph.		
Class 3 (Y2/3)						
Computing	Coding To design algorithms using flowcharts. To design an algorithm that represents a physical system and code this representation. To use	Spreadsheets To use the symbols more than, less than and equal to, to compare values. To collect data and produce a	e-mail To think about different methods of communication. To open and respond to an email using an address book. To	Branching databases To sort objects using just 'yes' or 'no' questions. To complete a branching database. To create a branching database	Simulations To consider what simulations are. To explore a simulation. To analyse and evaluate a simulation.	Graphing To enter data into a graph and answer questions. To solve an investigation and present the results in graphic form.

	<p>selection in coding with the 'if' command. To understand and use variables. To deepen understanding of the different between timers and repeat commands.</p> <p>Online safety To know what makes a safe password. Methods for keeping passwords safe. To understand how the Internet can be used in effective communication. To understand how a blog can be used to communicate with a wider audience. To consider the truth of the content of websites. To learn about the meaning of age restrictions symbols on digital media and devices.</p>	<p>variety of graphs. To learn about cell references.</p> <p>Touch typing To introduce typing terminology. To understand the correct way to sit at the keyboard. To learn how to use the home, top and bottom row keys. To practice typing with the left and right hand.</p>	<p>learn how to use email safely. To add an attachment to an email. To explore a simulated email scenario.</p>	<p>of the children's choice.</p>		
Class 4 (Y4/5)						
Computing	<p>Coding To represent a program design and algorithm. To create a program that simulates a physical system using</p>	<p>Online safety To gain a greater understanding of the impact that sharing digital content can have. To review sources</p>	<p>Spreadsheets Using the formula wizard to add a formula to a cell to automatically make a calculation in that cell. To</p>	<p>Databases To learn how to search for information in a database. To contribute to a class database. To create a database around a</p>	<p>3D modelling To be introduced the skills of computer aided design. To explore the effect of moving points</p>	<p>Concept maps To understand the need for visual representation when generating and discussing complex ideas. To</p>

	<p>decomposition. To explore string and text variable types so that the most appropriate can be used in programs. To use the Launch command. To program a playable game with timers and score pad.</p>	<p>of support when using technology and children's responsibility to one another in their online behaviour. To know how to maintain secure passwords. To understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons for this. To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. To learn about how to reference sources in their work. To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information.</p>	<p>copy and paste. Test a hypothesis. To add a formula to a cell to automatically make a calculation in that cell. Using a spreadsheet to model a real-life situation and answer questions.</p>	<p>chosen topic. Game creator To set the scene. To create the game environment. To create the game quest. To finish and share the game. To evaluate their and peers' games.</p>	<p>when designing. To understand designing for a purpose. To understand printing and making.</p>	<p>understand and use the correct vocabulary when creating a concept map. To create a concept map. To understand how a concept map can be used to retell stories and present information. To create a collaborative concept map and present this to an audience.</p>
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Class 5 (Y5/6)

<p>Computing</p>	<p>Coding To use the program design process, including flowcharts, to develop algorithms for more complex programs using and understanding of abstraction and decomposition to define the important aspects of the program. To code, test and debug from these designs. To use functions and tabs to improve the quality of the code.</p> <p>Online safety Identify benefits and risks of mobile devices broadcasting the location of the user/device. Identify secure sites by looking for privacy seals of approval. Identify the benefits and risks of giving personal information. To review the meaning of a digital footprint. To have a clear idea of appropriate online behaviour. To begin to</p>	<p>Spreadsheets To use a spreadsheet to investigate the probability of the results of throwing many dice. Using the formula wizard to add a formula to a cell to automatically make a calculation in that cell. To create graphs showing the data collected. To type in a formula for a cell to automatically make a calculation in that cell. Using a spreadsheet to create computational models and answer questions.</p>	<p>Blogging To identify the purpose of writing a blog and its key features. To plan the theme and content for a blog and write the content. To consider the effect upon the audience of changing the visual properties of the blog. To understand the importance of regularly updating the content of a blog. To understand how to contribute to an existing blog. To understand how and why blog posts are approved by the teacher.</p>	<p>Text adventures To find out what a text adventure is. To plan a story adventure. To make a story-based adventure. To introduce map-based text adventures. To code a map-based text adventure.</p>	<p>Networks To learn about what the Internet consists of. To find out what a LAN and a WAN are. To find out how the Internet is accessed in school. To research and find out about the age of the Internet. To think about what the future might hold.</p>	<p>Quizing To create a picture-based quiz for young children. To learn how to use question types. To explore grammar quizzes. To make a quiz that requires the player to search a database.</p>
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	<p>understand how information online can persist. To understand the importance of balancing game and screen time with other parts of their lives. To identify the positive and negative influences of technology on health and the environment.</p>					
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