



Skills	Rec	Year 1	Year 2	Year 3
Algorithms	<p>*children understand that all aspects of technology need instructions to work and this can be achieved by pressing buttons, turning dials and selecting apps or icons.</p>	<p>*children understand what an algorithm is and are able to represent a linear algorithm as a set of instructions. *children understand that computers need precise instructions. *children demonstrate care and precision to avoid errors. *children are able to complete a programme using 2go on purple mash. *children are able to complete 'fun with fish' and 'bubbles' using 2code on purple mash.</p>	<p>*children understand that algorithms are implemented on digital devices as programmes. *children can design simple linear algorithms and those that contain loops. *children use logical reasoning to predict outcomes. *children detect and correct errors and refer to this as debugging. *children are able to complete 'air traffic control', 'snail race' and 'vehicles' programmes using 2code on purple mash.</p>	
Programming and Development	<p>*children experiment with different programmable toys such as beebots and remote control cars. *children interact with age appropriate coding software such as 2go.</p>	<p>*children know that users can develop their own programs and can demonstrate this using beebots. *children can execute, check and change a program. *children understand that programs execute by following precise instructions.</p>	<p>*children use logical reasoning to predict the behavior of programs. *children can debug errors in programs.</p>	<p>*Writes programs that accomplish specific goals. *Uses sequence in programs. *Works with various forms of input. *Works with various forms of output.</p>
Data and Data Representation	<p>*Children will use 2count to create a simple pictogram to represent data collected by the class.</p>	<p>*children are aware that digital content can be represented in many forms. *children can distinguish between these forms and</p>	<p>*children recognize different types of data: text/numbers/diagrams etc.</p>	

Data and Data Representation ctd.	<p>*Children will analyse data on 2count and say which item is most or least popular.</p> <p>*Children will explore different ways of sorting objects on a screen.</p>	<p>explain the different ways that they communicate information.</p> <p>*Children will create a pictogram based on information they have collected and use it to answer simple questions.</p>	<p>*children can identify the type of data displayed for a particular program.</p> <p>*children recognize that data can be structures in tables to make it useful.</p> <p>*Children will create pictograms, charts and graphs in a variety of curriculum contexts, adding labels and numbers as appropriate.</p> <p>*children will talk about how ICT helps them to organise their information, edit and make rapid changes.</p>	
Hardware and Processing	<p>*Children will take a digital photograph.</p> <p>*Children will listen to an audio book using a digital device.</p>	<p>*children recognise that a range of digital devices can be considered a computer.</p> <p>*children can recognise and use simple devices such as an ipad to take a picture or video.</p>	<p>*children can recognise and use a range of input and output devices.</p>	
Communication and Networks	<p>*Children recognise common uses of information technology beyond school.</p> <p>* Children understand how technology is used in school, including links to the server, photocopier etc.</p>	<p>*children know what to do if they are concerned about online content.</p> <p>*children understand the importance of communicating safely and responsibly online and the need for keeping personal information private.</p> <p>*Children will show an awareness of how passwords can be used to keep certain information private.</p>	<p>*children navigate a website and can carry out simple web searches to collect digital content.</p> <p>*children demonstrate that they can use computers safely and responsibly.</p>	
Information Technology	<p>*children will interact with age appropriate software on IWB, laptops and ipads.</p>	<p>*with adult support children use software to create store and edit digital content using</p>	<p>*children use technology with increasing independence to</p>	<p>*Uses search technologies effectively.</p>

Information Technology ctd.		<p>an appropriate folder and file name.</p> <ul style="list-style-type: none"> *children know common uses of information technology beyond the classroom. *children can talk about their digital work and make changes to improve it. 	<p>purposefully organise digital content.</p> <ul style="list-style-type: none"> *children use a variety of software to manipulate and present digital content. *children can talk about their work and make improvements to solutions based on feedback received. 	<ul style="list-style-type: none"> *Uses a variety of software to accomplish given goals. *Collects information. *Designs and creates content. *Presents information.
Digital Imagery and Animation	<ul style="list-style-type: none"> *Children will click and drag images on a screen. *Children will select colours from a simple palette. *Children will use a mouse/track pad/touch screen to draw simple pictures. 	<ul style="list-style-type: none"> *Children will use different tools to draw a detailed picture where at least 3 different tools/effects are used. *Children will create a simple animation linking a series of at least 4 pictures. 	<ul style="list-style-type: none"> *children will use a range of drawing/painting programmes to add features and details to digital artwork. *Children will create an animation of at least 4 frames to demonstrate a scientific principle. 	
Word Processing	<ul style="list-style-type: none"> *Children will 'tap' letters rather than holding down the key. *Children will type their own name or simple label. 	<ul style="list-style-type: none"> *Children will use the 'shift' to type a capital letter. *Children will use the 'backspace' to delete a character. 	<ul style="list-style-type: none"> *Children will type a sentence using upper case, lower case and appropriate punctuation. *Children will delete letters and words to edit own work. *Children will change the font and size or a word. 	
Online Safety	<ul style="list-style-type: none"> *Children can name different types of technology and how they can be used. *Children understand what the internet is and types of technology that support it. *children relate our school policy to stories from childnet 'smartie the penguin' series. 	<ul style="list-style-type: none"> *children understand what the internet is and types of technology that support it. *children compare how staying safe online is similar to staying safe in the real world. *children learn the kind of information that is private and why they should never give out private information online. 	<ul style="list-style-type: none"> *children recognise if they should ask an adult they trust before they visit a particular website. *children know that information posted online leaves a digital footprint or trail. *children understand the term 'cyberbullying'. How to recognise it and what to do if they experience it. 	<ul style="list-style-type: none"> *Uses technology responsibly. *Identifies a range of ways to report concerns about contact.

Online Safety ctd.	*children know that they can go to a trusted adult to help them with problems they experience online. * children understand purple mash and how to log in.	*children navigate an age appropriate website and know what to do if they come across something they find upsetting or inappropriate. * children understand that the internet provides a means of communicating with people and they need to be kind as we would expect them to be if they were communicating with someone face to face.	*children understand that people you meet online are strangers and may not tell the truth. * children consolidate what they have learned about e-safety by creating a poster/leaflet on purple mash.	
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