



Stoke Canon C of E Primary School

Progression Framework for ICT



Digital Literacy

Knowledge- (National Curriculum) Digital Literacy						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
ELG EAD: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills.	Recognise common uses of information technology beyond school. 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.		Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour. Identify a range of ways to report concern about content and contact.			
Skills- Digital Literacy						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Recognise technology that is used at home and in school. Understand what a computer is and the different uses of computers i.e. learning, communicating, finding information, playing games etc. Reception Can name some familiar websites they use in school	Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair. Children understand the importance of keeping information, such as their usernames and passwords,	Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can share this knowledge. Children make links between technology they see around them, coding and multimedia work they do in school e.g. animations, interactive code and programs.	Children demonstrate the importance of having a secure password and not sharing this with anyone else. Furthermore, children can explain the negative implications of failure to keep passwords safe and secure. They understand the importance of staying safe and the importance of their conduct when using familiar communication tools such as	Children can explore key concepts relating to online safety using concept mapping. They can help others to understand the importance of online safety. Children know a range of ways of reporting inappropriate content and contact.	Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and online services. Children implicitly relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others.	Children demonstrate the safe and respectful use of a range of different technologies and online services. They identify more discreet inappropriate behaviours through developing critical thinking. They recognise the value in preserving their privacy when online for their own and other people

and at home. Children can begin to explain how the internet is useful to our every day lives. Describe the people they can trust and can share this with; explain why they can trust them. Know that the work they create belongs to them. Identify some simple examples of my personal information (e.g. Name, address, birthday, age, and location).	private and actively demonstrate this in lessons. Children take ownership of their work and save this in their own private space.	Children know the implications of inappropriate online searches. Children begin to understand how things are shared electronically such as posting work to Google Classroom. They develop an understanding of using email safely and know ways of reporting inappropriate behaviours and content.	email. They know more than one way to report unacceptable content and contact.			
Vocabulary- Digital Literacy						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Choices Internet Website Login Turn Off/ Turn On Computer PurpleMash	Login/ Logout Private Username Password Notification Tools Technology	Purposes E-Safety Cyberbullying Personal Information Private E-Book Podcast Password Search Engine	Digital Footprint Internet Communicate Results, Website Address Blog Password	WWW (Worlds Wide Web) Navigate Webpage Dynamics	SMART Rules Reputable Plagiarism Identity Theft Encryption Reference Bibliography Shared Image	Digital Footprint Screen Time Phishing PEGI Rating Spoof Website HTML

Computer Science (Coding)

Knowledge- (National Curriculum) Computer Science						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
C+L ELG:Make comments about what they have heard and ask questions to clarify their understanding. Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. PD ELG: Use a range of small tools, including scissors, paintbrushes and cutlery. Develop their small motor skills so that they can use a range of tools competently, safely and confidently.	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.				
Skills- Computer Science						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Give commands/instructions e.g. forward, backwards, go, stop, when using simple software/hardware Physical Coding: Can give commands to others not just on software/hardware i.e. giving directions in a PE lesson to a partner. Make choices about the buttons/icons to press, touch or click on when using simple software/hardware.	Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program. Children can work out what is wrong with a simple algorithm when the steps are out of order. Children know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code.	Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code. Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. Debug Challenges.	Children can turn a simple real-life situation into an algorithm for a program by deconstructing it into manageable parts. Children can identify an error within their program that prevents it following the desired algorithm and then fix it. Children demonstrate the ability to design and code a program that follows a simple sequence. They experiment	When turning a real life situation into an algorithm, the children’s design shows that they are thinking of the required task and how to accomplish this in code using coding structures for selection and repetition. Children make more intuitive attempts to debug their own programs. Children’s use of timers to achieve repetition effects are becoming more logical and are	Children may attempt to turn more complex real-life situations into algorithms for a program by deconstructing it into manageable parts. Children are able to test and debug their programs as they go and can use logical methods to identify the approximate cause of any bug but may need some support identifying the specific line of code. Children can translate	Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction) and then decomposing them in a logical way. Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.

	When looking at a program, children can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in 2Go challenges will end up at the end of the program.	Children's program designs display a growing awareness of the need for logical, programmable steps. Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program.	with timers to achieve repetition effects in their programs. Children are beginning to understand the difference in the effect of using a timer command rather than a repeat command when creating repetition effects. Children understand how variables can be used to store information while a program is executing. Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately. Children can list a range of ways that the internet can be used to provide different methods of communication. appropriate email conventions when communicating in this way.	integrated into their program designs. Children are able to use and manipulate the value of variables. Children can make use of user inputs and outputs such as 'print to screen'. Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. Children recognise the main component parts of hardware which allow computers to join and form a network. Their ability to understand the online safety implications associated with the ways the internet can be used to provide different methods of communication is improving.	algorithms that include sequence, selection and repetition into code with increasing ease and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures. Children understand the value of computer networks but are also aware of the main dangers. They recognise what personal information is and can explain how this can be kept safe. Children can select the most appropriate form of online communications contingent on audience and digital content.	Children translate algorithms that include sequence, selection and repetition into code and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures, including nesting structures within each other. Coding displays an improving understanding of variables in coding, outputs such as sound and movement, inputs from the user of the program such as button clicks and the value of functions. Children are able to interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole. Children understand and can explain in some depth the difference between the internet and the World Wide Web. Children know what a WAN and LAN are and can describe how they access the internet in school.
Vocabulary- Computer Science						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Beebot Program Instructions Code block Coding Input Stop command Coder Command Technology tablets laptops microphone		Code Communication Emails Applications Platform Variables Investigation Input Output Variables Simulations Impractical		WAN/LAN Algorithm Debug Code Communication Digital Content	

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Information Technology

Knowledge- (National Curriculum) Information Technology						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
UTW ELG: Talk about the lives of the people around them and their roles in society. UTW ELG: Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class. EAD ELG: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.				
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.						
Skills- Information Technology						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Manage a device by correctly closing websites or apps and safely turning on and off. Input commands using the space bar, backspace, enter, letters and numbers on a keyboard on any device (including on a tablet). Input commands using a	Children are able to sort, collate, edit and store simple digital content. They can name, save and retrieve their work and follow simple instructions to access online resources.	Children demonstrate an ability to organise data and can retrieve specific data for conducting simple searches. Children are able to edit more complex digital data such as music compositions. Children are confident when creating, naming, saving and retrieving content. Children use a range of media	Children can carry out simple searches to retrieve digital content. They understand that to do this, they are connecting to the internet and using a search engine such as Purple Mash search or internet-wide search engines. Children can collect, analyse, evaluate and present data and information using a selection of software.	Children understand the function, features and layout of a search engine. They can appraise selected webpages for credibility and information at a basic level. . Children are able to make improvements to digital solutions based on feedback. Children make informed software choices when presenting information and	Children search with greater complexity for digital content when using a search engine. They are able to explain in some detail how credible a webpage is and the information it contains. Children are able to make appropriate improvements to digital solutions based on feedback received and can confidently comment on the success of the solution. They	Children readily apply filters when searching for digital content. They are able to explain in detail how credible a webpage is and the information it contains. They compare a range of digital content sources and are able to rate them in terms of content quality and accuracy. Children use critical thinking skills in everyday use of online

mouse to control a cursor and use the left click to select options OR use finger control to interact with a tablet (double tap, swipe) Experience simple apps and software and use these to present ideas Discussing how technology has changed over time. How it differs across cultures by sharing artefacts, photos and videos, and asking others. (Links to history).		in their digital content including photos, text and sound.	Children can consider what software is most appropriate for a given task. They can create purposeful content to attach to emails.	data. They create linked content using a range of software. Children share digital content within their community, i.e. using Google Classroom or Twitter.	objectively review solutions from others. Children are able to collaboratively create content and solutions using digital features within software such as collaborative mode. They are able to use several ways of sharing digital content, i.e. Email, Google Classroom, Twitter and	communication. Children make clear connections to the audience when designing and creating digital content. The children design and create their own blogs to become a content creator on the internet, e.g. 2Blog on PurpleMash. They are able to use criteria to evaluate the quality of digital solutions and are able to identify improvements, making some refinements.
Vocabulary- Information Technology						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technology Share Create Internet	Purpose Online tools Communicate Information sources Communication Purposes Website content		School network Devices Computer parts Collaborate Appropriate online communication Search tools Appropriate websites Owner Different networks Information collection Reliability Owners		Computing devices Internet parts Collaboration Responsibility Searching strategies Webpages Information movement Connecting devices Different audiences Research strategies Search result rankings Acknowledge resources	