Poulton Lancelyn Primary School

Computing Aims - Progression Map

part of
Oak Trees
MULTI ACADEMY TRUST

Aims: The National Curriculum for computing aims to ensure that all pupils:	Foundation	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
▪ **Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.** ▪ **Can analyse problems in computing terms, and have repeated practical experience of writing computer programs in order to solve such problems.**	To solve simple algorithms. Code Studio To use a mouse, touch screen or appropriate device to target, click and select options on a screen.	To write simple algorithms. Code Studio To create a simple computer program. Code Studio Scratch Junior	To write algorithms for everyday tasks. Code Studio To create and debug simple computer programs. Code Studio Scratch Junior	To decompose a task into separate steps to create an algorithm. Code Studio To understand why computers are Networked. To design and create programs that accomplish specific goals.	To use abstraction to focus on what's important in my design. To understand that servers on the Internet are located across the planet. To evaluate my program and identify errors.	To use logical reasoning to detect and correct errors in algorithms. Code Studio To explain how we view web pages on the Internet. To use logical reasoning to detect and correct errors in programs.	To write precise algorithms for use when programming. Code Studio To use search technologies effectively. Google Search To appreciate how pages are ranked in a search engine. Google Search To create programs that control or simulate.

• **Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.**	To type letters with increasing confidence using a keyboard and tablet. Word To sort physical objects, take a picture and discuss what I have done. To create a simple digital collage. I can record and play a film. Pic Collage I can use a painting app and explore the paint and brush tools. I can record sounds with different resources.	To use a paint/drawing app to create a digital image. MS Paint To increasingly confidently type words quickly and correctly on a digital device. To sort images or text into two or more categories on a digital device.	To select and use tools to create digital imagery - controlling the pen and using the fill tool. To use the space bar only once between words and use touch to navigate to words and letters to edit. Word To create a short video with sound effects and titles. To import images to a project from the web and camera roll	To use cut, copy and paste to quickly duplicate and organise text. Word To confidently take and manipulate photos. iPads To create an eBook with text, images and sound. To animate a character and create a video. To add music and sound effects to my videos.	To confidently and regularly use text shortcuts such as cut, copy and paste and delete to organise text. Word To create a presentation demonstrating my understanding with a range of media. PowerPoint To enhance digital images and photographs using crop, brightness, contrast & resize. To sequence clips of mixed media in a timeline and record a voiceover.	To start to apply other useful effects to my documents such as hyperlinks. Word PowerPoint To create and export an interactive presentation. including a variety of media, animations, transitions and other effects. PowerPoint To use simple formulae to solve calculations including =sum and other statistical functions. Excel To add voice over and edit sound clips to use in a film or podcast	To publish my documents online regularly and discuss the audience and purpose of my content. SeeSaw To edit a picture to remove items, add backgrounds, merge two photos. To write spreadsheet formula to solve more challenging maths problems. Excel To confidently choose the best application to demonstrate my learning.

Are responsible, competent, confident and creative users of information and communication technology.	Self-image & ID	Self-image & ID	Self-image & ID	Self-image & ID	Self-image & ID	Self-image & ID	Self-image & ID
	To recognise that I can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed or upset.	To recognise that there may be people online who could make me feel sad, embarrassed or upset.	To give examples of issues online that might make me feel sad, worried, uncomfortable or frightened; I can give examples of how I might get help.	To explain what is meant by the term 'identity'.	To explain how my online identity can be different to the identity I present in 'real life'.	To demonstrate responsible choices about my online identity, depending on context.	To describe issues online that might make me or others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline.
	Managing online info	**Managing online info**	**Managing online info**	**Managing online info**	**Managing online info**	**Managing online info**	**Managing online info**
	To identify different devices, I could use to access information on the internet.	To use the internet to find things out.	To demonstrate how to navigate a simple webpage to get to information I need.	To use key phrases in search engines.	To describe how I can search for information within a wide group of technologies (e.g. social media, image sites, video sites).	To evaluate digital content and can explain how I make choices from search results.	To use search technologies effectively.
	Online reputation	**Online reputation**	**Online reputation**	**Online reputation**	**Online reputation**	**Online reputation**	**Online reputation**
	To identify ways that I can put information on the internet.	To describe what information I should not put online without asking a trusted adult first.	I know who to talk to if I think someone has made a mistake about putting something online.	To recognise I need to be careful before I share anything about myself or others online.	To explain ways that some of the information about me on line could have been created, copied or shared by others.	To describe ways that information about people online can be used by others to make judgments about an individual.	To describe some simple ways that help build a positive online Reputation
	Online relationships	**Online relationships**	**Online relationships**	**Online relationships**	**Online relationships**	**Online relationships**	**Online relationships**
	To recognise some ways in which the internet can be used to communicate.	To explain why it is important to be considerate and kind to people online.	To give examples of how I might use technology to communicate with others I don't know well.	To explain why I should be careful who I trust online and what information I can trust them with.	To give examples of how to be respectful to others online.	To describe some of the communities in which I am involved and describe how I collaborate with others positively.	To demonstrate ways of reporting problems online for both myself and my friends.
	Privacy & security	**Privacy & security**	**Privacy & security**	**Privacy & security**	**Privacy & security**	**Privacy & security**	**Privacy & security**
	To identify some simple examples of my personal information	To explain how passwords can be used to protect information and devices.	To describe and explain some rules for keeping my information private.	To understand and can give reasons why passwords are important.	To describe strategies for keeping my personal information private, depending on context.	To explain how many free apps or services may read and share my private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others.	To describe effective strategies for managing my passwords.
	Health & wellbeing	**Health & wellbeing**	**Health & wellbeing**	**Health & wellbeing**	**Health & wellbeing**		**Health & wellbeing**
	To give simple examples of rules that keep us safe and healthy when using technology.	To explain rules that keep us safe & healthy when we are using technology both in and beyond the home.	To explain simple guidance for using technology in different environments and settings	To explain why spending too much time using technology can sometimes have a negative impact on me.	To suggest strategies to help me limit this time the amount of		To demonstrate the strategies I use to do regulating my use of technology
	Online bullying	**Online bullying**		**Online bullying**			
		To describe how to behave online in		To describe rules about how to			

	To offer examples of how being unkind online can make others feel. **Copyright and ownership** To name my work so that others know it belongs to me.	ways that do not upset others and can give examples. **Copyright and ownership** To save my work so that others know it belongs to me.	**Online bullying** To talk about how someone can/would get help about being bullied online or offline. **Copyright and ownership** To recognise that content on the internet may belong to other people.	behave online and how I follow them. **Copyright and ownership** To explain why copying someone else's work from the internet without permission can cause problems.	time I use technology. **Online bullying** To identify some online technologies where bullying might take place. **Copyright and ownership** When searching on the internet for content to use, to explain why I need to consider who owns it and whether I have the right to reuse it.	**Health & wellbeing** To describe some strategies, tips or advice to promote healthy sleep with regards to technology. **Online bullying** To describe how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone. **Copyright and ownership** To give examples of content that is permitted to be reused.	**Online bullying** To identify a range of ways to report concerns both in school and at home about online bullying. **Copyright and ownership** To demonstrate how to make references to and acknowledge sources I have used from the internet.

Key:

🟨	**Computer Science**
🟩	**Information Technology**
🟦	**Digital Literacy**