Progression in Computing

Sandbach Heath St John's CE Primary

Computing Knowledge and Skills	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Programming	To direct a Bee-Bot by writing their own algorithm made up of a sequence of instructions.	To open the App Scratch Junior on the I-Pad and start a new project, add characters and backgrounds, use blocks to move in different directions and create a sequence of instructions. To use the online program Turtle Logo to program the turtle to move forwards a number of steps and turn a 90-degree angle. To use Turtle Logo and/or Scratch give commands to draw lines of different length, move blocks into the script area and snap block commands together.	To develop their understanding of how technology works and how computers process instructions and commands, including the use of coding languages. To control an onscreen icon using text-based programming, including writing complex written algorithms which involve sensors. To deconstruct and investigate the effect of changing variables in simulations. To know that simulations are often guided by hidden rules	To develop their understanding of how technology works and how computers process instructions and commands, including the use of coding languages. To control an onscreen icon using text-based programming, including writing complex written algorithms which involve sensors. To deconstruct and investigate the effect of changing variables in simulations. To know that simulations are often guided by hidden rules	To develop their understanding of how technology works and how computers process instructions and commands, including the use of coding languages. To use more complex programming software which interacts with external controllers, and elements on screen, creating algorithms and using logic and calculations. To control an onscreen icon using text-based programming, including writing complex written algorithms which involve sensors. To deconstruct and investigate the effect of changing variables in simulations. To know that simulations are often guided by hidden rules	To develop their understanding of how technology works and how computers process instructions and commands, including the use of coding languages. To use more complex programming software which interacts with external controllers, and elements on screen, creating algorithms and using logic and calculations. To control an onscreen icon using text-based programming, including writing complex written algorithms which involve sensors. To deconstruct and investigate the effect of changing variables in simulations. To know that simulations are often guided by hidden rules
Digital Literacy	To begin to learn and use the layout of a	To use the internet and appropriate search	To use technology to present their work,	To use technology to present their work,	To use technology to present their work,	To use technology to present their work,

	keyboard and use a mouse and touch pad.

To use Microsoft Word to present some of their written work.

To use Paint Software to create a picture (Microsoft Paint, 2paint)

To recognise common uses of information technology beyond school (for example, games console, washing machine, card reader) | engines (e.g. Squiggle, Yahoo, Google, Bing for Kids) or websites provided by the teacher to research information.

To use navigation skills to access different parts of a website.

To begin to save and retrieve pictures and text.

To begin to learn and use the layout of a keyboard and use a mouse and touch pad. To use Microsoft Word to present some of their written work.

To use Paint Software to create a picture (Microsoft Paint, 2paint)

To begin to use Microsoft PowerPoint to insert text and pictures to present learning. | showing an increasing degree of skill and using advanced features of software and tools.

To select tools which they can use to help them achieve a specific aim and justify these choices to others. | showing an increasing degree of skill and using advanced features of software and tools.

To select tools which they can use to help them achieve a specific aim and justify these choices to others.

To use digital devices for video recording and editing (digital camera, digital video recorder, I-Pad, video editor). | showing an increasing degree of skill and using advanced features of software and tools.

To select tools which they can use to help them achieve a specific aim and justify these choices to others. | showing an increasing degree of skill and using advanced features of software and tools.

To select tools which they can use to help them achieve a specific aim and justify these choices to others.

To use technology, including spreadsheets to create graphs and present data in different ways.

To use digital devices for video recording and editing (digital camera, digital video recorder, I-Pad, video editor).

To use, search, enter data into and create their own databases.

To design, construct, evaluate and modify simple models i.e. enter data, enter formulae, copy cells and use simple formatting in a spreadsheet. |
| **E-Safety** | Passwords
To explain what a password is
To explain why we need passwords
To can create a good | Digital Footprint
To describe what a digital footprint is
To understand that everything I do online contributes to | Cyberbullying
To explain what cyberbullying is
To know what to do if myself or someone I know is being bullied | Phishing
To know what an email is
To understand that some emails contain information which is | Cyberbullying
To know what to do if myself or someone I know is being bullied online
To empathise with | Phishing
To know what 'phishing' means
To identify a possible phishing email
To know what do if I |

	password by following the rules Friends To know there are different ways to communicate online To understand what an online community is and who should be in mine Time Online To know how much time I should spend online each day To understand that I should take part in a variety of activities every day to help me stay healthy	my digital footprint Positive Communication To know how to treat people with respect online and in real life To understand that my actions have consequences To know what to do if someone is unkind online Private Information To know what private information means To name some type of private information To know what information I should not share online	online To know how to behave responsibly online Digital Footprint To know what a digital footprint is To know how a digital footprint is created To know how to keep myself and my friends and family safe online Fake News To know what is meant by the terms 'News' and 'Fake News' To start to understand why Fake News is used To start to understand how to recognise Fake News Friends To know the difference between my real life friends and my online friends To know how to keep myself safe when communicating online Passwords To explain why we need passwords To create a good password by following the rules To teach others about the importance of password safety	not true. To know what do if I receive a strange email. Photos To understand that anything I upload to the internet is there forever To understand that I should ask for permission when uploading a photo Self image To understand that not everything I see on the internet is real. To try not to judge myself by what I see online. To try to celebrate all the good things about me. Things are not always as they seem To understand that not everything online is as it seems To understand that it is much easier for people to lie online Time Online To know how spending too much time online can affect my health To understand the health benefits of a balanced lifestyle To start to understand how to plan my time	people who may have been victims of bullying Digital Footprint To know what a digital footprint is To know how a digital footprint is created To know how my digital footprint can affect my future Fake News To explain what Fake News is. To have developed strategies to help spot when a news story might be fake. To explain why certain groups use Fake News. Gaming To understand the importance of PEGI ratings To understand the risks of making in-app and gaming purchases To understand how to keep myself and others safe online Images To know what social media is To understand what is meant my privacy settings To know how to keep my private information safe	receive a phishing email. Privacy Settings To know what social media is To understand what is meant my privacy settings To know how to keep my private information safe Self image To understand that not everything I see on the internet is real. To try not to judge myself by what I see online. To understand what is meant by emotional resilience TickTok To know what the TikTok app is used for. To understand that there are pros and cons to using it To know how to keep myself safe if using the app. Time Online To know how spending too much time online can affect my health To understand the health benefits of a balanced lifestyle To give opinions and justify them with reasons

				effectively.	Passwords To know how important it is to keep my passwords safe and private To know how to create a very strong password	Whats App To know what the WhatsApp app is used for. To understand that there are pros and cons to using it To know how to keep myself safe if using the app.