

# Suffield Park Infant and Nursery School Progression Map for Computing 2022/2023



Confident, Resilient, Ambitious, Brilliant

Note: EYFS-Non Statutory guidance only. Key stage One: Computing objectives in Red. Primary: Relationships objectives in Green. Health objectives in Blue.

Subject: Computing      Subject Leader: Ms Michelle Mitchell			
Title for Block of Teaching: Technology in our lives.			
Yr Group	Knowledge	Skills	Vocabulary
R	<p>No ELG but: Children require access to a range of technologies, both digital and non-digital in their early lives. Exploring with different technologies through play provides opportunities to develop skills that children will go on to develop in their lifetimes. Investigations, scientific inquiry and exploration are essential components of learning about and with technology both digitally and in the natural world. Through technology children have additional opportunities to learn across all areas in both formal and informal ways. Technologies should be seen as tools to learn both from and with, in order to integrate technology effectively within early years practice.</p>	<p>Range 5 Knows how to operate simple equipment, e.g. turns on CD player, uses a remote control, can navigate touch-capable technology with support Shows an interest in technological toys with knobs or pulleys, real objects such as cameras, and touchscreen devices such as mobile phones and tablets Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new image Plays with a range of materials to learn cause and effect, for example, makes a string puppet using dowels and string to suspend the puppet</p> <p>Range 6  To be able to use simple equipment e.g. cameras, tablets, IWB, role play tills etc. To understand cause and effect e.g. if I press a button, 'something' happens. To be able to name technology that is used at home and at school.</p>	<p>Home. School. Technology. Device. Ipad. Tablet. Phone. Desktop computer. Camera. Laptop. Interactive Whiteboard. TV. Internet. Knob. Pulley. Twist. Turn. Swipe. Rotate. Touch. Press. Button. Click. Hold. Drag.</p>
1	<p><b>Recognise common uses of information technology beyond school.</b> <b>For most people the internet is an integral part of life and has many benefits.</b> <b>About the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing.</b></p>	<p>To be able to recognise the ways we use technology in the classroom, home and community. To know that the internet has become a part of everyday life. To be able to identify some of the benefits of using technology. To be able to talk about why you should go online for a short amount of time (screen time). To start to think about what the negatives might be to being online.</p>	<p>Community. Games console. Electronic device. Smart Home devices like Hey Google/Alexis. Online. Benefits. Positive. Negative. Screen time.</p>

2	<p>Recognise common uses of information technology beyond school.</p> <p>For most people the internet is an integral part of life and has many benefits.</p> <p>About the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing.</p> <p>That the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health.</p>	<p>To be able to talk about how and why we use technology in the classroom, home and community. To be able to identify benefits of using technology including finding information, creating, gaming and communicating. To be able to talk about the differences between online and things in the physical world. To be able to talk about why you should go online for a short amount of time including effects on mental and physical wellbeing, if we do not. To begin to understand why the internet can be a negative place and how it can make us feel. To begin to understand that some people use the internet to be unkind and to know that this is not right.</p>	<p>Creating. Information. Gaming. Communicating. Physical World. Physical wellbeing. Mental wellbeing. Healthy balance. Trolling. Bullying. Harassment.</p>
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**Title for Block of Teaching:** Online Safety.

Year Group	Knowledge	Skills	Vocabulary
R	<p><i>Use technology safely and to know where to go for help if they are worried.</i></p> <p>Range 5 Knows that information can be retrieved from digital devices and the internet.</p> <p>Range 6 Can use the internet with adult supervision to find and retrieve information of interest to them</p>	<p>To be able to talk about what we mean by 'going online' e.g. using the internet/Google, cbeebies, Espresso etc. To be able to name devices which can be used online e.g. tablet, games consoles, computers etc. To know that there are rules which need to be followed when we use technology and go online. To be able to tell someone how to stay safe online. To know that they need to ask an adult if they can go online/play an online game/visit a website/use an App. To be able to name adults which they trust. To know that they need to talk to a trusted adult if something online upsets, worries or scares them. To know that they should not click on buttons they do not know and if something pops up, then they need to tell an adult. To be able to talk about the amount of time they spend using a computer/tablet/game device and start to understand that this should be for a short amount of time.</p>	<p>Devices. Online. Internet. Computers. Tablet. ipad. Games consoles. Rules. Safe. Technology. Online game. Website. App. Adults. Trust. Pops up. Amount of time.</p>
1	<p>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.</p> <p>Where and how to report concerns and get support with issues online.</p> <p>The rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them.</p>	<p>To be able to follow rules to keep safe online. To be able to tell someone how to stay safe online and why this is important. To begin to understand what personal information is e.g. name, DOB, address, password, school, phone number. To begin to understand that personal information needs to be kept private, but that this can be shared with trusted adults. To be able to name adults which they trust. To know that they need to talk to a trusted adult if something online upsets, worries or scares them. To know that if something pops up when online then</p>	<p>Personal Information. Full name. DOB. Address. Password. School. Phone number. Private. Trust. Upsets. Worries. Scares. Information. Strangers. Real life. Message. Internet. Pretending. Kind. Polite. Online</p>

	<p>How to critically consider their online friendships and sources of information including awareness of the risks associated with people they have never met.</p> <p>That people sometimes behave differently online, including by pretending to be someone they are not.</p> <p>That the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others online including when we are anonymous.</p> <p><b>How to consider the effect of their online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private.</b></p> <p><b>Why social media, some computer games and online gaming, for example, are age restricted.</b></p>	<p>they need to speak to an adult. To understand that people have created the information which we use online. To know that any information which is put online by us or others, can stay online for a long time. To know some ways in which the internet can be used to communicate e.g. message, email, chat. To know that when they are online they should only talk to/message/play games with, people that they know in real life, and that their adults have said that they can. To understand that people online, that they do not know, are strangers. To know that they should never meet up with online people/strangers in real life. To know that not everyone is who they say they are on the Internet, that they could be pretending. To know that we must be kind when we are online (online relationships), just like we are in real life (face-to-face relationships). To begin to understand that our online actions can affect other people; either in a positive way or negative way. To know that computer games/online games can have age restrictions. To ask an adult before playing a new game or using a new APP/website, to check that it is suitable.</p>	<p>relationships.</p> <p>Face-to-face relationships. Online actions. Effect. Positive. Negative. Age restrictions. Suitable.</p> <p>Online games. Computer games. Communicate. Chat. Emails.</p>
2	<p><b>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.</b></p> <p><b>Where and how to report concerns and get support with issues online.</b></p> <p>The rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them.</p> <p>How to critically consider their online friendships and sources of information including awareness of the risks associated with people they have never met.</p> <p>That people sometimes behave differently online, including by pretending to be someone they are not.</p> <p>That the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others online including when we are anonymous.</p>	<p>To be able explain rules for keeping safe online and can say why/how these rules keep you safe. To be able to give examples of what personal information is e.g. full name, DOB, address, password, school, phone number. To understand why personal information needs to be kept private. To be able to explain how passwords can be used to protect information and devices. To know how to seek help if they have a problem online. To know that there are safety tools online which can be used to block, report or flag up. To know how and where to find these safety tools. To understand that people have created the information which we use online and that some information found online may not be true. To know that any information which is put online by us or others, can stay online for a long time and could be copied. To know who to talk to if someone has made a mistake when putting something online. To know that not everyone is who they say they are on the Internet, that they could be pretending and if you do not know them in real life then they are a stranger. To be able to describe ways in which</p>	<p>Protect. Seek help. Safety tools. Block. Report. Flag up. Created. Copied. Behave. Anonymous. Companies. Digital footprint. Targeted. Social media. Embarrassed.</p>

	<p><b>How to consider the effect of their online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private.</b></p> <p>How information and data is shared and used online.</p> <p><b>How to be a discerning consumer of information online including understanding that information, including that from search engines, is ranked, selected and targeted.</b></p> <p><b>Why social media, some computer games and online gaming, for example, are age restricted.</b></p>	<p>people might make themselves look different online. To know that there may be people online who could make you feel sad, embarrassed or upset, this could also be people who we consider are our friends. To be able to describe how to behave online in ways that does not upset others. To know that the same rules apply to real life face-to-face relationships as they do to our online relationships. To know that we must always be kind even if we are anonymous - meaning that someone does not know that it is us. To understand that our online actions can affect other people; either in a positive way or negative way. To begin to understand that what we do online is used by companies. To begin to understand that we leave a digital footprint when we are online. To begin to understand that companies will use what I look at, to target things to me. To be able to explain why computer games/online games/social media have age restrictions. To know what social media is.</p>	
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**Title for Block of Teaching:** Multimedia and Handling Data.

Year Group	Knowledge	Skills	Vocabulary
R	<p>Range 6</p> <p>Can create content such as a video recording, stories, and/or draw a picture on screen</p> <p>Develops digital literacy skills by being able to access, understand and interact with a range of technologies</p>	<p>To be able to talk about how information can be shown in different ways e.g. pictures, videos, text, sound. To be able to find information by using an electronic device e.g. computer, tablet, website, App, search engine with support. To be able to click on buttons using an IWB pen/mouse/finger. To be able to swipe on a tablet. To be able to move objects around on screen with an IWB pen/mouse/finger. To be able to move the mouse to where you need the pointer/arrow/curser to be on screen. To be able to click and drag using a mouse. To be able to double click using a mouse. To be able to create text on screen by pressing letter keys on a keyboard/pressing buttons on a touch screen, with support. To be able to choose a piece of technology to complete a particular task.</p>	<p>Hold. Icon. Drag. Text. Object. Information. Picture. Video. Sound. Electronic device. Find. Press. Website. Click. Buttons. Mouse. Finger. Swipe. IWB pen. Screen. Keyboard. Touch screen. App. Double click. Text. Pointer. Arrow. Curser. Letter keys. Search Engine.</p>
1	<p><b>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</b></p>	<p>To know what digital content is e.g. anything which is on an electrical device. To be able to purposely use technology to collect information, including photos, video, sound. To be able to find information by using an electronic device e.g. computer, tablet, website, App, search engine. To be able to use technology to organise, create and show ideas e.g. Textease,</p>	<p>Organise. Create. Store. Manipulate. Textease. Purposely. Microsoft Office. ActivInspire. Document. Editing. Adding. Deleting. Save.</p>

		Microsoft Office, ActivInspire etc, with support. To be able to create text on screen by pressing keys on a keyboard/pressing buttons on a touch screen. To begin to locate and use the basic function keys e.g. space bar, backspace, enter, caps lock. To be able to make changes to an existing document by editing, adding, deleting, with support. To be able to save information in a certain place and find it again, with support.	My Documents. Retrieve. Digital content. Function keys. Space bar. Enter. Backspace. Delete. Keys. Caps lock.
2	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	To be able to talk about the different ways we use technology to specifically collect information, e.g. camera, microscope, Ipad, sound recorder. To be able to talk about what kind of technology/software could be used to help with a specific task. To be able to suggest websites, Apps etc, which could be used to find information. To be able to use technology to organise, create and show ideas e.g. Textease, Microsoft Office, ActivInspire etc. To be able to create text on screen by pressing keys on a keyboard/pressing buttons on a touch screen, for others to read. To be able to locate and use the basic function keys correctly e.g. space bar, backspace, enter, caps lock, shift. To be able to make changes to an existing document by editing, adding, deleting. To be able to save information in a certain place and find it again.	Microscope. Sound Recorder. Software. Shift key.

**Title for Block of Teaching:** Programming.

Year Group	Knowledge	Skills	Vocabulary
R	Range 6 Completes a simple program on electronic devices Uses ICT hardware to interact with age appropriate computer software	To know some simple instructional language. To be able to follow simple instructions from an adult/friend to move around e.g. take two steps forwards. To be able to give instructions to someone to move around e.g. take two steps backwards. To be able to use simple software to make something happen. To understand cause and effect e.g. if I press a button 'something' happens. To make choices about which buttons/icons need to be pressed, touched, clicked on to make something happen. To be able to use the basic functions of the IWB e.g. pen, rubber, changing colour/thickness etc. To be able to make a floor robot move by pressing the buttons. To begin to know the functions of the buttons on the floor robots.	Swipe. Turn. Touch. Press. Button. Click. Hold. Drag. Pen. Rubber. Change colour/thickness. Floor robot. Instructions. Functions. Forwards. Backwards. Follow.
1	Understand what algorithms are; how they are implemented as programs on digital devices; and that	To know some instructional language. To be able to follow step-by-step instructions from an adult/friend to move around	Rotate. Left. Right. Clear. Function. Algorithm.

	<p>programs execute by following precise and unambiguous instructions.</p> <p>Create and debug simple programs.</p> <p>Use logical reasoning to predict the behaviour of simple programs.</p>	<p>e.g. take three steps forward, turn left and sit down. To be able to give step-by-step-instructions to someone to move around e.g. take three steps backwards, turn right and jump. To begin to use software/apps to create movement and patterns on a screen. To begin to press the buttons in the correct order to make something move e.g. beebot, car on screen. To start to work out what might have been done wrong if it doesn't do what was wanted. To know the functions of the buttons on the floor robots. To begin to know that devices are following step-by-step instructions. To begin to predict what will happen for a short set of instructions. To begin to use the word coding e.g. writing instructions for computers is known as coding. To begin to use the word algorithm e.g. an algorithm is a set of instructions designed to perform a task. To begin to use the word debug e.g. to debug means to find and to get rid of errors, something which is wrong with the code.</p>	<p>Coding. Code. Debug. Error. Instructional language. Step-by-step. Predict. Devices</p>
2	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</p> <p>Create and debug simple programs.</p> <p>Use logical reasoning to predict the behaviour of simple programs.</p>	<p>To know some instructional language, including mathematical language. To know that writing instructions for computers is known as coding. To know devices use algorithms to perform all tasks. To know that programs execute by following precise and unambiguous instructions. To be able to describe what actions will be needed to make something happen/ move. To be able to use programming software to make objects move. To be able to press the buttons in the correct order to make something move e.g. beebot, car on screen, and to talk about this being an algorithm. To be able to watch a program execute and if it goes wrong, spot the mistake so that it can be debugged. To be able to predict what will happen for a sequence of instructions.</p>	<p>Quarter turn. Half turn. Whole turn. Program. Execute. Precise. Unambiguous. Sequence. Debugged.</p>