

Progression of Computing Skills & Age Related Expectations

Information Technology						
Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>I can play on a touch screen game and use computers/ keyboards/ mouse in role play</p> <p>I can type letters with increasing confidence using a keyboard and tablet.</p>	<p>I can type words on a digital device.</p> <p>I can use the space bar to make space and delete to delete letters/words</p> <p>I can make a new line using enter/return</p>	<p>I can use the space bar only once between words and use touch to navigate to words letter to edit</p> <p>I can copy and paste images and text</p> <p>Use caps locks for capital letters.</p>	<p>I can edit the style and effect of my text and images to make my document more engaging and eye-catching. For example, borders and shadows.</p> <p>I can use cut, copy and paste to quickly duplicate and organise text.</p>	<p>I can combine digital images, objects and text to make a final piece of a variety of tasks: posters, documents, leaflets.</p> <p>Use text shortcuts such as cut, copy and paste and delete.</p> <p>Use font sizes appropriately.</p> <p>Use spell check and thesaurus</p>	<p>I can start to apply other useful effects to my documents such as hyperlinks.</p> <p>I can import sounds to accompany and enhance the text in my document.</p> <p>I can organise and reorganise text on screen to suit a purpose</p>	<p>I can confidently choose the best application to demonstrate my learning.</p> <p>I can format text to suit a purpose. • I can discuss the audience and purpose of my content.</p>
<p>I can identify a chart.</p> <p>I can sort physical objects, take a picture and discuss what I have done.</p>	<p>I can sort images or text into two or more categories on a digital device.</p> <p>I can collect data on a topic.</p> <p>I can create a tally chart and pictogram.</p>	<p>I can sort digital objects into a range of charts such as Venn diagrams, carroll diagrams and bar charts using different apps and software.</p> <p>I can explain what the data shows me.</p>	<p>I can create my own sorting diagram and complete a data handling activity with it using images and text.</p> <p>I can start to input simple data into a spreadsheet.</p>	<p>I can create my own online multiple choice questionnaire.</p> <p>I can input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, pie charts.</p>	<p>I can use simple formulae to solve calculations including =sum and other statistical functions</p> <p>I can edit and format different cells in a spreadsheet.</p>	<p>I can write spreadsheet formula to solve more challenging maths problems.</p> <p>I can create and publish my own online quiz</p>
<p>I can animate a simple image to speak in role</p> <p>I can create a simple animation to tell a story</p>	<p>I can create an animation to tell a story.</p> <p>I can add my own pictures to my story animation.</p>	<p>I can create a simple stop motion animation.</p> <p>I can explain how an animation/flip book works</p>	<p>I can improve stop motion animation clips with techniques like onion skinning.</p> <p>I can use animation tools in presenting</p>	<p>I can take multiple animations of a character I have created and edit them together for a longer video.</p>	<p>I can record animations of different characters and edit them together to create an interview.</p>	<p>I can mix animations and videos recordings of myself to create video interviews.</p> <p>I can choose and create different</p>

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including more than one character			software to create simple animations.	I can use line draw tool to create animations	I can create flip book animation using digital drawings and export as a Gif or video	types of animations to best explain my learning.
I know the difference between a photography and video. I can record a short film using the camera I can watch films back	I can record a film using the camera app. I can select images and record a voiceover.	I can use tools to add effects to a video	I can sequence clips of mixed media in a timeline and record a voiceover I can trim and cut film clips and add titles and transitions	I can add music and sound effects to my films I can add animated titles and transitions I can add simple subtitles to a video clip.	I can use cutaway and split screen tools in iMovie. I can evaluate and improve the best video tools to best explain my understanding.	I can add animated subtitles to my film to further enhance my creation. I can create videos using a range of media - green screen, animations, film and image.
I can take a photograph and use it in an app I can use a painting app and explore the paint and brush tools	I can edit a photo with simple tools I can use a paint/drawing app to create a digital image	I can edit a photo (crop, filters, mark up etc) I can cut images with accuracy to layer on other images	I can confidently take and manipulate photos I can create a digital image using a range of tools, pens, brushes and effects	I can enhance digital images and photographs using crop, brightness, contrast & resize I can manipulate shapes to create digital art.	I can make a digital photo using camera settings I can link and explain how to photoshop images and how this is used in the media	I can edit a picture to remove items, add backgrounds, merge 2 photos I can evaluate and discuss images explaining effects and filters that have been used to enhance the media.

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Computer Science						
<i>Year R</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Year 6</i>
<p>I can follow simple oral algorithms</p> <p>I can spot simple patterns</p> <p>I can sequence simple familiar tasks</p>	<p>I understand what algorithms are</p> <p>I can write simple algorithms</p> <p>I understand the sequence of algorithms is important</p> <p>I can debug simple algorithms</p> <p>I understand that algorithms are implemented as programs on digital devices</p>	<p>I can write algorithms for everyday tasks</p> <p>I can use logical reasoning to predict the outcome of algorithms</p> <p>I understand decomposition is breaking objects/ processes down</p> <p>I can implement simple algorithms on digital devices (Bee Bots, Apps: Daisy the Dino)</p> <p>I can debug algorithms</p>	<p>I can create algorithms for use when programming</p> <p>I can decompose tasks (such as animations) into separate steps to create an algorithm</p> <p>I understand abstraction is focusing on important information</p> <p>I can identify patterns in an algorithm</p> <p>I can use repetition in algorithms</p>	<p>I can use abstraction to focus on what's important in my design</p> <p>I can write increasingly more precise algorithms for use when programming.</p> <p>I can use simple selection in algorithms</p> <p>I can use logical reasoning to detect and correct errors in programs</p>	<p>I can solve problems by decomposing them into smaller parts</p> <p>I can recognise the need for conditions in repetition within algorithms</p> <p>I can use logical reasoning to explain how a variety of algorithms work or to detect and correct errors in algorithms</p> <p>I can evaluate my work and identify errors</p>	<p>I can recognise, and make use, of patterns across programming projects</p> <p>I can write precise algorithms for use when programming</p> <p>I can identify variables needed and their use in selection</p> <p>I can decompose code into sections for effective debugging</p> <p>I can critically evaluate my work.</p>
			<p>I understand that computers in a school are connected together in a network</p> <p>I understand why computers are networked</p>	<p>I understand that servers on the Internet are located across the planet</p> <p>I understand how email is sent across the Internet</p> <p>I understand how the Internet enables us to collaborate</p>	<p>I understand how we view web pages on the Internet</p> <p>I use search technologies effectively</p> <p>I appreciate how pages are ranked in a search engine</p>	<p>I understand what HTML is and recognize HTML tags</p> <p>I know a range of HTML tags and can remix a web page</p>

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Digital Literacy						
<i>Year R</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Year 6</i>
I can 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.	I can recognise that there may be people online who could make me feel sad, embarrassed or upset. If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust.	I can describe ways in which people might make themselves look different online. I can 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.	I can explain how I can represent myself in different ways online. I can explain ways in which and why I might change my identity depending on what I am doing online (e.g. gaming; using an avatar; social media).	I can explain how my online identity can be different to the identity I present in 'real life' Knowing this, I can describe the right decisions about how I interact with others and how others perceive me.	I can explain how identity online can be copied, modified or altered. I can demonstrate responsible choices about my online identity, depending on context.	I can 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. <ul style="list-style-type: none"> • I can explain why I should keep asking until I get the help I need.
I can recognise some ways in which the internet can be used to communicate.	I can explain why it is important to be considerate and kind to people online.	I can give examples of how I might use technology to communicate with others I don't know well.	I can describe ways people who have similar likes and interests can get together online. I can give examples of technology-specific forms of communication (e.g. emojis, text speak). I can explain how my and other people's feelings can be hurt by what is said or written online.	I can describe strategies for safe and fun experiences in a range of online social environments I can give examples of how to be respectful to others online.	I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my/our fault. I can describe some of the communities in which I am involved and describe how I collaborate with others positively.	I can show I understand my responsibilities for the well-being of others in my online social group. I can explain how impulsive and rash communications online may cause problems. I can demonstrate how I would support others (including those who are having difficulties) online.

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			I can explain why I should be careful who I trust online and what information I can trust them with.			I can demonstrate ways of reporting problems online for both myself and my friends.
	I can describe what information I should not put online without asking a trusted adult first	I can explain how information put online about me can last for a long time. I know who to talk to if I think someone has made a mistake about putting something online	I can recognise I need to be careful before I share anything about myself or others online. I know who I should ask if I am not sure if I should put something online	I can describe how others can find out information about me by looking online. I can explain ways that some of the information about me online could have been created, copied or shared by others.	I can search for information about an individual online and create a summary report of the information I find. I can describe ways that information about people online can be used by others to make judgments about an individual.	I can explain how I am developing an online reputation which will allow other people to form an opinion of me. I can describe some simple ways that help build a positive online reputation
I can describe ways that some people can be unkind online. I can offer examples of how this can make others feel.	I can describe how to behave online in ways that do not upset others and can give examples.	I can give examples of bullying behaviour and how it could look online. I understand how bullying can make someone feel.	I can explain what bullying is and can describe how people may bully others. I can describe rules about how to behave online and how I follow them.	I can identify some online technologies where bullying might take place. I can explain why I need to think carefully about how content I post might affect others, their feelings and how it may affect how others feel about them (their reputation).	I can describe how to get help for someone being bullied online and assess when I need to do something or tell someone. I can explain how to block and report abusive users. I can describe the helpline services who can support me (e.g. Childline).	I can describe how to capture bullying content as evidence (e.g screen-grab) to share with others who can help me. I can identify a range of ways to report concerns both in school and at home about online bullying.

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<p>I can talk about how I can use the internet to find things out.</p>	<p>I can use the internet to find things out. I can use simple keywords in search engines</p>	<p>I can use keywords in search engines. I can demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons). I can explain the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'. I can explain why some information I find online may not be true</p>	<p>I can use key phrases in search engines. I can explain what autocomplete is and how to choose the best suggestion. I can explain how the internet can be used to sell and buy things I can explain the difference between a 'belief', an 'opinion' and a 'fact'.</p>	<p>I can analyse information and differentiate between 'opinions', 'beliefs' and 'facts'. I can describe some of the methods used to encourage people to buy things online (e.g. pop-ups). I can explain that some people I 'meet online' (e.g. through social media) may not be real people. I can explain why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true.</p>	<p>I can use different search technologies. I can evaluate digital content and can explain how I make choices from search results. I understand the difference between online mis-information (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed with intent to mislead). I can explain what is meant by 'being sceptical' and can give examples of when and why it is important to be 'sceptical'. I can explain why some information I find online may not be honest, accurate or legal.</p>	<p>I can use search technologies effectively. I can explain how search engines work and how results are selected and ranked. I can demonstrate the strategies I would apply to be discerning in evaluating digital content. I can explain how and why some people may present 'opinions' as 'facts'. I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important. I can identify, flag and report inappropriate content.</p>
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<p>I can identify rules that help keep us safe and healthy in and beyond the home when using technology.</p>	<p>I can explain rules to keep us safe when we are using technology both in and beyond the home. I can give examples of some of these rules.</p>	<p>I can explain simple guidance for using technology in different environments and settings. I can say how those rules/guides can help me</p>	<p>I can explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples (e.g. games, films, videos).</p>	<p>I can explain how using technology can distract me from other things I might do or should be doing. I can identify times or situations when I might need to limit the amount of time I use technology. I can suggest strategies to help me limit this time.</p>	<p>I can describe ways technology can affect healthy sleep and can describe some of the issues. I can describe some strategies, tips or advice to promote healthy sleep with regards to technology</p>	<p>I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. I can explain the importance of self-regulating my use of technology; I can demonstrate the strategies I use to do this (e.g. monitoring my time online).</p>
<p>I can identify some simple examples of my personal information (e.g. name, birthday, age, location). I can describe the people I can trust and can share this with.</p>	<p>I can recognise examples of information that is personal to me (e.g. where I live, my family's names, where I go to school). • I know I should always ask a trusted adult before I share any information about myself online. • I can explain how passwords can be used to protect information and devices.</p>	<p>I can describe why other people's work belongs to them. I can recognise that content on the internet may belong to other people.</p>	<p>I can give reasons why I should only share information with people I choose to and can trust I understand and can give reasons why passwords are important. I can describe simple strategies for creating and keeping passwords private.</p>	<p>I can explain what a strong password is. I can describe strategies for keeping my personal information private. I can explain that others online can pretend to be me or other people, including my friends I can suggest reasons why they might do this.</p>	<p>I can explain how many free apps or services may read and share my private information (e.g. friends, contacts, likes, images, videos) with others. I can explain how some apps may take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a</p>	<p>I can describe effective strategies for managing passwords. I know what to do if my password is lost or stolen. I can explain what app/privacy permissions are and can give some examples from the technology or services I use. I can describe ways in which some online content targets people to</p>

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					trusted adult before purchasing	gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing)
I know that work I create belongs to me. I can name my work so that others know it belongs to me.	I can explain why work I create using technology belongs to me. I can say why it belongs to me (e.g. 'it is my idea' or 'I designed it'). I can save my work so that others know it belongs to me (e.g. filename, name on content).	I can describe why other people's work belongs to them. I can recognise that content on the internet may belong to other people	I can explain why copying someone else's work from the internet without permission can cause problems.	When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.	I can assess and justify when it is acceptable to use the work of others. I can give examples of content that is permitted to be reused.	I can demonstrate the use of search tools to find and access online content which can be reused by others.