



EASINGTON PRIMARY ACADEMY

COMPUTING PROGRESSION DOCUMENT

Knowledge & Skills

Ebor Progression of Knowledge and Skills - Strand Progression						
Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Control Systems	<p>Explain/demonstrate what algorithms are</p> <p>Create simple programmes</p>	<p>Explain/demonstrate how algorithms are implemented as programmes on digital devices.</p> <p>Explain/demonstrate how programmes run by following precise instructions</p> <p>Use logical reasoning to predict the behaviour of programmes</p> <p>Debug simple programmes</p>	<p>Explain/demonstrate how programmes can be applied to various forms of input and output.</p> <p>Write programmes that create specific goals</p> <p>Use sequence in programmes</p> <p>Work with various forms of input and output</p>	<p>Explain/demonstrate how computer networks are, e.g. the internet</p> <p>Experiment with variables to control models</p> <p>Design, write and debug programmes that perform specific goals.</p> <p>Use sequence, selection and repetition in programs; work with variables.</p> <p>Make accurate predictions about what I think will happen</p>	<p>Explain/demonstrate how computer networks work including the internet</p> <p>Combine sequences of instructions to turn an external device on and off</p> <p>Use logical reasoning to detect errors in algorithms</p> <p>Use selection accurately within programs</p>	<p>Explain/demonstrate how sensors can be used within programmes.</p> <p>I can explore 'what if' questions by planning different scenarios for controlled devices</p> <p>Use logical reasoning to detect errors in more complex algorithms</p> <p>Combine a variable with relational operators (< = >) to determine when a program changes, e.g. if score > 5, say "well done"</p> <p>Design a physical computing system that uses sensors, e.g. using a flow chart</p> <p>Refine a program based on end user feedback.</p>
Vocabulary	Algorithms, programmes, open and move.	(As before +) Logical, predict, debug, precise instructions.	(As before +) Create, specific goals, sequence, input and output.	(As before +) Experiment, variables, control, design, write, selection and repetition, accurate networks, internet.	(As before +) Combine, logical reasoning, external device, detect.	(As before +) Combine, relational operators (< = >), physical computing system, flow chart, end user.
Information Technology	<p>Explain/demonstrate how technology can be used to create and store digital content</p> <p>Use technology to create content</p>	<p>Explain/demonstrate how technology can be used edit, amend or adapt digital content.</p> <p>Discuss and explore how to use ICT to organise, present and explain/demonstrate how data</p>	<p>Explain/demonstrate how digital content can be used to find, retrieve and present information.</p> <p>Use search technology to communicate effectively</p>	<p>Explain/demonstrate how information can be presented in different ways using various platforms and programmes.</p> <p>Select and use software to accomplish given goals</p>	<p>Explain/demonstrate how search results are ranked.</p> <p>Explain/demonstrate the benefits of technology to collaborate with others</p> <p>Recognise an audience when</p>	<p>Explain/demonstrate & appreciate how search results are ranked and how this affects the end user.</p> <p>Discuss and explore the use of ICT to sort, organise and classify objects based on their</p>

	<p>Use technology to store digital content</p> <p>Use a mouse or trackpad effectively to navigate websites</p> <p>Save and reopen work on a digital device</p>	<p>as a simple graph.</p> <p>Use technology to create, communicate and collaborate</p> <p>Use ICT to source, generate and amend images.</p> <p>Begin to change or enhance photographs and pictures (crop, recolour).</p> <p>Create a simple animation using still images</p> <p>Take digital photographs and record video</p> <p>Use software to explore sound and musical phrases.</p>	<p>Use technology to collect information</p> <p>Use a database to retrieve information</p> <p>Present data in a range of ways to convey information</p> <p>Use technology to collaborate on a task</p> <p>Edit digital content in response to feedback</p>	<p>Collect and present data in different ways</p> <p>Design and create digital content for a specific purpose</p> <p>Evaluate and analyse information</p> <p>Use technology to collaborate in different ways</p> <p>Use ICT to compose music or sounds including creating melodies</p> <p>Storyboard and shoot a short stop motion animated sequence.</p> <p>Use a range of tools to edit and enhance media for particular effect</p>	<p>designing and creating digital content</p> <p>Select and combine software on a range of devices</p> <p>Generate, amend and combine visual media from different sources for a specific audience or task.</p> <p>Create a movie including still images and sound and add suitable titles and transitions.</p> <p>Capture/review different images, considering lighting, positioning and angle appropriate to a given task/audience.</p> <p>Use filters in a database to find out specific information</p> <p>Identify and use appropriate hardware and software to fulfil a specific task</p> <p>Create different types of graphs and charts that are appropriate to the data I am using; I can use them to interpret and answer a specific question.</p> <p>I can select and use suitable software and hardware to produce a multimedia soundtrack.</p>	<p>properties.</p> <p>Select and combine software on a range of devices</p> <p>Collaborate with individuals and groups to create digital content for a specific purpose.</p> <p>Use ICT to create and modify charts quickly and easily.</p> <p>Create databases, retrieve information and draw conclusions based on results entered.</p> <p>Find suitable images, video and sounds from appropriate sources, taking into account copyright issues.</p> <p>Remix and edit a range of media to create content.</p> <p>Use appropriate ICT resources to compose music or sounds to accompany a story.</p> <p>Choose appropriate hardware to capture and review a range of images, considering lighting, positioning, sound quality and angle.</p>
<p>Vocabulary</p>	<p>Computer, tablet, mouse, keyboard, website, technology, phone, click, scroll, type, enter, digital, website, save and reopen.</p>	<p>(As before +) Organise, create, communicate and collaborate, source, generate and amend, crop, recolour, animation, photographs and video, software, present, data, simple graph.</p>	<p>(As before +) Collect, database, retrieve, task, edit, feedback.</p>	<p>(As before +) Select, specific purpose, evaluate, analyse, compose, storyboard, shoot, enhance, media.</p>	<p>(As before +) Search results, ranked, combine, generate, audience, movie, titles, transitions, capture, review, images, positioning, angle, filters (database), hardware, graphs and charts, multimedia, soundtrack..</p>	<p>(As before +) Organise and classify, modify, retrieve, draw conclusions, appropriate sources, remix, accompany, sound quality.</p>

Digital Literacy	<p>Recognise common uses of technology beyond school</p> <p>Use technology safely Log on to a computer</p> <p>Keep personal information private</p>	<p>Explain/demonstrate where/how to seek help when they have concerns about content</p> <p>Use technology respectfully</p>	<p>Recognise the benefits and risks of different apps and websites</p> <p>Explain/demonstrate the importance of a good password</p> <p>Explain/demonstrate the dangers of spending too long online and the importance of regular screen breaks.</p> <p>Recognise/explain when to share personal information and when not to</p> <p>Use technology responsibly Identify a range of ways to share concerns about conduct</p>	<p>Recognise acceptable and unacceptable behaviour using technology</p> <p>Explain/demonstrate the opportunities technology offers for communication</p> <p>Compose emails</p> <p>Know how to respond to unpleasant communications via texts, IM, email or chat rooms.</p> <p>Be discerning in evaluating digital content</p>	<p>Know where to find copyright free images and audio, and why this is important</p> <p>Recognise and explain the issues of copyright and the importance of acknowledging sources.</p> <p>Explain/demonstrate how everything we do online leaves a digital footprint that can last forever</p> <p>Know what to do and who to contact if we see something that upsets / concerns us online.</p> <p>Explain/demonstrate how privacy settings do and what pictures are appropriate to share online.</p> <p>Discuss the benefits and dangers of communicating online/through different forms of technology.</p> <p>Know the meaning of common website extensions (.org, .net. Gov etc)</p> <p>Explain/demonstrate what makes a strong password and why this is important at school and in the wider world</p> <p>Beginning to question information based on author and location; recognise different viewpoints and the impact of incorrect data.</p> <p>Share and exchange ideas using emails/electronic communication respectfully.</p>	<p>Explain/demonstrate the impact of an individual sending or uploading unkind or inappropriate content.</p> <p>Explain/demonstrate what 'Plagiarism' means and that it is important to acknowledge sources.</p> <p>Explain that not all information on the internet is legal to use or copy</p> <p>Explain/demonstrate how we are all digital citizens and the potential impact and influence we can have on the outside world</p> <p>Know the meaning of common website extensions (.org, .net. Gov etc) Identify secure servers (padlock such as internet banking).</p> <p>Become increasingly savvy online consumers: know that algorithms are used to track online activities with a view to targeting advertising and information</p> <p>Critically evaluate websites for reliability of information/ bias and authenticity to include use of social media</p> <p>Demonstrate responsible use of online services and technologies, and know a range of ways to report concerns</p> <p>Produce formal or informal messages, appropriate to the task</p>

Vocabulary	Log on, password, computer, age appropriate, personal information, private.	(As Before +) Respectful, concern, content.	(As Before +) Responsible, identify, recognise, benefits and risks, screen breaks, online.	(As Before +) Acceptable / unacceptable, email, texts, IM, chat rooms.	(As Before +) Copyright, images and audio, author, location, viewpoints, share, exchange, acknowledging sources, digital footprint, privacy settings, appropriate, website extensions.	(As Before +) Critically evaluate, bias, authenticity, demonstrate, impact, uploading, plagiarism, legal, secure servers, consumers, targeting advertising.
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