Building Brighter Futures Together

Eastwood Community School
ICT curriculum

EYFS	Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes	
Algorithms and programming • Play on a touch screen game and use computers/keyboards/mouse in role play • Press buttons on a Beebot and talk about the movements	Information Technology • Help adults operate equipment around the school, independently operating simple equipment • Use simple software to make things happen- QR codes • Use a camera or sound recorder to collect photos or sound	Digital Literacy: • Talk about good & bad choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something is upsetting
Year 1 ICT	**Year 2 ICT**	**Year 3 ICT**
Algorithms and programming • Use directional language to direct a friend around the classroom. • Create a series of instructions and follow them • Plan a journey for a programmable toy. Information technology • Become familiar with the keys on a keyboard. • Create and save a new word document. • Type simple sentences in a word document. • Open a saved word document and edit. • Create, store and retrieve digital content. • Use a web site to locate information and images. • Use a camera. • Record sound and play back. Digital literacy	Algorithms and programming • Use a range of instructions (e.g. direction, angles, turns). • Test and amend a set of instructions. • Find errors and amend. (debug) • Use programming to direct a Beebot. • Write a simple program and test it. • Predict what the outcome of a simple program will be (logical reasoning). • Understand that algorithms are used on digital devices. • Understand that programs require precise instructions. Information technology • Create and save a new word document/open an existing document and type a paragraph. • Create and save a new PowerPoint presentation. • Insert slides on PowerPoint to create a slide show presentation with up to 5 slides.	Algorithms and programming • Design a sequence of instructions, including directional instructions. • Write programs that accomplish specific goals. • Work with various forms of input. • Work with various forms of output. Information technology • Use a range of software for similar purposes. • Collect information from a range of sources on the internet. • Present information using Word or PowerPoint. • Design and create content. • Search for information on the web in different ways. • Manipulate and improve digital images. • Insert headings and subheadings on a word document and PowerPoint. • View, select and apply custom themes to PowerPoint presentations.

• Use technology safely. • Keep personal information private. • Know what information I can share and what information I can't share.	• Organise, retrieve and manipulate digital (text/images) into a word document and PowerPoint using the copy and paste function. • Format text in a PowerPoint presentation through editing size, font and colour. • Navigate the web to complete simple searches. <u>Digital literacy</u> • Use technology respectfully. • Know where to go for help if I am concerned. • Know how technology is used in school and outside of school. • Know how to use the internet safely.	• Insert and manipulate shapes, lines, arrows and text boxes into Word and PowerPoint. <u>Digital literacy</u> • Use technology respectfully and responsibly. • Know different ways I can get help if I am concerned. • Understand what computer networks do and how they provide multiple services. • Discern where it is best to use technology and where it adds little or no value.
<u>Year 1 vocabulary:</u> Directions Forward Backward Right Left Turn Programme Plan Type Keyboard Tab Backspace Copy Pasting Format Colour Size Font Create New Save Retrieve Edit Digit Record sound Playback Camera Internet Safety	<u>Year 2 vocabulary:</u> As Year 1 vocabulary Angles Test Amend Errors Debug Predict Logical Reasoning Digital Devices Precise PowerPoint Word document Slide show Text Navigate Website Search engines Technology Respect Cyber bullying Email True False Appropriate/inappropriate sites Cyber-bullying Digital footprint Keyword searching	<u>Year 3 vocabulary:</u> As Year 2 vocabulary Sequence Write programme Input Output Software Collect Manipulate Improve Insert headings Subheadings Transition Bullet points Tables Sequence instructions Sequence debugging Test + improve Logo commands Sequence programming Multimedia Presentations Alignment Brush size Repeats Reflections Green screening

Rules Online Private information Email Instructions Buttons Robots Patterns Program Videos Camera stills Sounds Image bank Word bank Space bar Purpose Online tools Communicate Photographs Video Sound Data Pictogram Digitally	Forward Backward Right-angle turn Algorithm Sequence Debug Predict Paint effects Templates Animation Documents Index finger typing Enter/return Caps lock Backspace Information sources Communication Purposes Website content	Amend Copy Paste School network Devices Computer parts Collaborate Appropriate online communication Search tools Appropriate websites Owner Questioning Database Construct Contribute Recording data Data logger Present data
Cultural Capital **& Learning Beyond the Classroom opportunities** Writing/typing letters to Santa Research /study local /world facts information Perform/share a PowerPoint/QR code game they have created Go on a QR code trail in the school/local area Email/write/type letter to friend in different country linked to topic Read e-books fiction and non fiction	**Cultural Capital** **& Learning Beyond the Classroom opportunities** Writing/typing letters to Santa Research /study local /world facts information Perform/share a PowerPoint/QR code game they have created Go on a QR code trail in the school/local area Email/write/type letter to friend in different country linked to topic Read e-books fiction and non- fiction	**Cultural Capital** **& Learning Beyond the Classroom opportunities** Create and perform a multimedia presentation, adding text, slides and upload to website. Use a variety of paint programmes and create art work In the style of famous artist linked to topic e.g. Salvador Dali Create a story and make an e-book for others to shares on our website– use programme such as 2 Simple Learn about famous musicians/composers and listen to them e.g. Strauss/Justin Timberlake

Year 4 ICT	Year 5 ICT	Year 6 ICT
<u>Algorithms and programming</u> • Experiment with variables to control models. • Give an on-screen robot specific instructions that takes them from A to B using scratch. • Make an accurate prediction and explain why I believe something will happen (linked to programming). • Evaluate why programming might not work. • De-bug a program. <u>Information technology</u> • Select and use software to accomplish given goals. • Produce and upload a pod cast. • Collect, input and present data in a table in Excel. • Insert bullet points and numbered lists in a word document and PowerPoint presentation. • Assign a transition to a slide and modify timings in PowerPoint. • Create a self-running template on PowerPoint. • Insert a table into a word document and input relevant information. • Navigate the web to complete more complex searches. <u>Digital literacy</u> • Recognise acceptable and unacceptable behaviour using technology. • Explain and give examples of online dangers or cyberbullying and the consequences of this including depression, anxiety, feelings of sadness and loneliness, changes in sleep and eating patterns, loss of interest in hobbies and health problems.	<u>Algorithms and programming</u> • Combine sequences of instructions and procedures to turn devices on and off. • Use technology to control an external device. • Design algorithms that use repetition & 2-way selection. <u>Information technology</u> • Analyse and evaluate information. • Understand how search results are selected and ranked. • Edit a film. • Collect and input data into a table and present in a chart/graph on Excel. • Apply word processing skills to an email. • Use different forms of presentation including prezi/google slides to present information. • Insert a sound or video file into a PowerPoint presentation. • Insert a hyperlink into an email and word document. <u>Digital literacy</u> • Understand that you have to make choices when using technology and that not everything is true and/or safe. • Know the age restrictions for social networking sites. • Identify the advantages and disadvantages of social networking. • Understand what is meant by fake news and identify fake news. • Understand the importance of password safety. • Show awareness of privacy settings.	<u>Algorithms and programming</u> • Design a solution by breaking a problem up. • Recognise that different solutions can exist for the same problem. • Use logical reasoning to detect errors in algorithms. • Use selection in programs and discuss why I have chosen the program. • Work with variables. • Explain how an algorithm works. • Explore 'what if' questions by planning different scenarios for controlled devices. <u>Information technology</u> • Use Excel to present data selecting the most appropriate type of graph/chart. • Insert a hyperlink or link into a PowerPoint presentation. • Understand the function of spell check and use to correct documents. • Modify layout on a word document including using columns and centering/aligning text. • Insert hyperlinks and links within PowerPoint. • Select, use and combine software on a range of digital devices. • Use a range of technology for a specific project. <u>Digital literacy</u> • Discuss the risks of online use of technology including bullying (trolling), gaming addictions and grooming and identify how to minimise these risks. • Understand what is meant by copyright. • Identify the advantages and disadvantages of downloading materials.
<u>Year 4 vocabulary:</u> As Year 3 vocabulary Variables Control Models	<u>Year 5 vocabulary:</u> As Year 4 vocabulary Combine Procedures Repetition	<u>Year 6 vocabulary:</u> Responsible online communication Informed choices Virus threats

On screen Upload Podcast Excel Template Navigate Assign Timings E-safety rules Secure passwords Report abuse button Gaming Blogs Creating + modifying Specific purpose Photo modifying Keyboard shortcuts Bullet points Spell check Constructive feedback Different networks Information collection Reliability Owners Database creation Database searches Inaccurate data	Hyperlink Edit Networking Explore procedures Refine procedures Variable Hardware + software control Change inputs Different outputs Articulate solutions Commands Online sharing Multimedia effects Multimedia modification Transitions Hyperlinks Editing tools Refining Online sharing Computing devices Internet parts Collaboration Responsibility Searching strategies Webpages Spreadsheets Complex searches (and/or: </>) Problem solving Present answers Analyse information Question data Interpret	Blogs Messaging Predicting outputs Plan, program, test & review a program Program writing Control mimics + devices Sensors Measure input Create variables Link errors Appropriate online tools Audience Atmosphere Structure Copyright Information collection HTML code Storing Information movement Connecting devices Different audiences Research strategies Search result rankings Acknowledge resources Generate Process Interpret Store Present information Plausibility Appropriate data tool Interrogate Investigations
Cultural Capital **& Learning Beyond the Classroom opportunities** Create and perform a multimedia presentation, adding text, slides and upload to website.	**Cultural Capital** **& Learning Beyond the Classroom opportunities** Compose a piece of music/song using simple music programme – 2Simple Visit Bradford National science and media museum-	**Cultural Capital** **& Learning Beyond the Classroom opportunities** Compose a piece of music/song using simple music programme – 2Simple

Use a variety of paint programmes and create art work in the style of famous artist linked to topic e.g. Salvador Dali Create a story and make an e-book for others to shares on our website– use programme such as 2 Simple Learn about famous musicians/composers and listen to them e.g. Strauss/Justin Timberlake Take photos of the local area/contrasting areas and create posters/portraits/ art work	Learn all about famous authors- make a e-book Design and make a programme/game for a younger child in school- using SCRATCH/2 Simple Learn and study a local artist such as David Hockney/Sue lewington	Visit Bradford National science and media museum- Learn all about famous authors- make a e-book Design and make a programme/game for a younger child in school- using SCRATCH/2 Simple Learn and study a local artist such as David Hockney/Sue Lewington Make a pod-cast/video – e.g. a story for a younger school member/ facts about a famous person/information about our school