

Jennett's Park Computing Curriculum

Intent

At our school we want pupils to be MASTERS of technology and not slaves to it. Technology is everywhere and will play a pivotal part in students' lives. Therefore, we want to model and educate our pupils on how to use technology positively, responsibly and safely. We want our pupils to be creators not consumers and our broad curriculum encompassing computer science, information technology and digital literacy reflects this. We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education. We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils. Our knowledge rich curriculum has to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists. Staff embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope, by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

Educating for Wisdom, Knowledge and Skills	To help grow resourceful, resilient and reflective children who are equipped with the skills, knowledge and tenacity empower themselves, their learning throughout their lives.
Educating for Hope and Aspiration	To inspire and enrich lives beyond current opportunities and experiences in order to open minds to the potential their future holds
Educating for Community and Living Well Together	To be a multi-cultural, inclusive community of individuals loved by God who feel valued and involved where we create qualities of character to enable people to flourish.
Educating for Dignity and Respect	That children might know how much that they are loved and valued by so that they might show dignity and respect for themselves and others by carefully and safely thinking through their actions.

Implementation

We have created a comprehensive progression document for staff to follow to best embed and cover every element of the computing curriculum. The knowledge/skills statements build year on year to deepen and challenge our learners.

Information Technology	Computer Science	Digital Literacy
<ul style="list-style-type: none"> ● Word Processing/Typing ● Data Handling ● Presentations ● Web design and eBook creation ● Animation Video creation ● Photography and Digital Art 	<ul style="list-style-type: none"> ● Computational Thinking ● Programming 	<ul style="list-style-type: none"> ● Self-Image and Identity ● Online Relationships ● Online Reputation ● Tackling Online Bullying ● Managing Online Information ● Health, Wellbeing and Lifestyle

		<ul style="list-style-type: none"> • Privacy and Security • Sound Copyright and Ownership
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How to Implement the progression document and long term plan

We feel the majority of computing should be embedded across the curriculum. Most schools will be timetabled to a Computing session each week, however knowing how packed a weekly timetable can be, we hope this approach will allow for flexibility. The timetabled computing session focuses on one of two elements: ***An Explicit Computer Science lesson or A Tinkering Session.*** The computer science part of the computing curriculum will often, but not always, need a more explicit approach. That is not to say it can't be embedded across the curriculum. A tinkering session looks at introducing a new app or tool and giving children opportunity to experiment and familiarise themselves with the different elements and tools before it can be applied in a more focused approach across the curriculum. Therefore, some weeks computing can be covered by using technology to demonstrate learning in other subjects.

For example: If my class were covering World War 2 in Year 5 and we are exploring how the Second World War started, I could set the children the task of creating a video explaining this. First, the children may want to research some more information about how the Nazi party rose to power. This would involve covering some Digital Literacy: Managing Online Information - *• 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 describe how some online information can be opinion and can offer examples.* If the pupils were to then create a video using an app such as Adobe Spark Video to demonstrate their learning, they would be covering some of the Information Technology: Video Creation - *• I can create videos using a range of media - green screen, animations, film and image.* If the pupils were to then upload or publish their work on a blog or platform such as Seesaw, we would also be covering this objective from Information Technology: Word Processing objectives - *• I can publish my documents online regularly and discuss the audience and purpose of my content.* Even though this would be a History lesson, we would be covering a fair few computing objectives therefore if we need to spend more time on other subjects that week, we are still covering computing without having a timetabled computing session. This is the way computing is delivered in our school, embedded to allow learning to be more accessible and allow learners to be more creative in demonstrating their learning.

Impact

We encourage our children to enjoy and value the curriculum we deliver. We will constantly ask the WHY behind their learning and not just the HOW. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development and well-being. Finding the right balance with technology is key to an effective education and a healthy life-style. We feel the way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond. We encourage regular discussions between staff and pupils to best embed and understand this. The way pupils showcase, share, celebrate and publish their work will best show the impact of our curriculum. We also look for evidence through reviewing pupil's knowledge and skills digitally. Progress of our computing curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.



Information Technology

This part of the curriculum is essentially most of the old ICT curriculum. As stated in the introduction, most of these objectives should be covered by using technology creatively across the rest of the curriculum, although it may be necessary to teach some discrete skills, hence the tinkering sessions. Learners should know that technology is everywhere, be able to identify the technology they encounter and have a growing understanding of how it works. We have broken down this part of computing into activities for word processing, spreadsheets and data handling, presentation, ebook creation, web design, animation, video creation, photography, art and sound. When using these ideas to create content everything should link closely to digital literacy – awareness of audience and good design principles. Pupils should experience a range of different apps and software. Lower down the school, the teacher will select the programs to use but as pupils get older they should be encouraged to make their own choices. Learners also need to know how to store and organise their files online and locally so that it can easily be found again.

Information Technology Progression detail

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> Learn how to type letters, with increasing confidence using a keyboard. Explore combining painting tools to make digital art. Use ICT hardware to interact with age-appropriate computer. Learn to dictate short, clear sentences into a digital device. 	<ul style="list-style-type: none"> Learn how to type words quickly and correctly using a keyboard. Make simple word processed documents and change the appearance of text. Use and combine a variety of painting tools to create a picture. 	<ul style="list-style-type: none"> Make word processed documents combining images with text. Change the appearance of text so it matches a document's theme. Use and combine a variety of brush styles and painting tools to create a picture. Create a multimedia e-book combining: text, painted pictures 	<ul style="list-style-type: none"> Type text into different programs and change its style by applying a range of font effects. Create documents and posters by combining text boxes with inserted images. Create a multimedia e-book combining: text, images voice recordings and shapes. Shoot a digital photo and explore tools to edit it. 	<ul style="list-style-type: none"> Type and design a variety of documents, posters and leaflets using ICT. Learn rules for creating neat word processed work. Produce a multimedia video topic with music and narration. Create online multiple-choice quizzes. Shoot and edit digital photos effectively. Create a photo collage. Create a word collage. 	<ul style="list-style-type: none"> Enter formulae into a spreadsheet to solve calculations and model scenarios, including using =SUM() and statistical functions. Change the format of cells of cells using: text alignment, borders and data types. Create a multimedia on-screen presentation over several slides, adding animation and transition effects to enhance it. Compare ways for manipulating digital images to enhance them. 	<ul style="list-style-type: none"> Write spreadsheet formulae to solve maths problems (e.g. unit convertors). Create an on-screen presentation with slide transitions, advanced animation effects and action buttons. Edit images using layering techniques. Create and edit a stop motion animation. Be able to create tables
Summary of core progression in information technology						
Learn to start typing and navigation around	Improve fluency in typing words	Typing speeds improving and creating e-booklets	Change style and presentation of text	Speeds of typing and navigation are now such that they	Basic formulas in and formatting in excel	More detailed formulas in excel



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a computer word processing packages Use basic drawing packages	Create basic pictures	More detail to pictures	Create more detailed e-books	can confidently use these to fulfil a range of tasks	Multimedia presentation with transitions	Advanced multimedia presentations with action buttons
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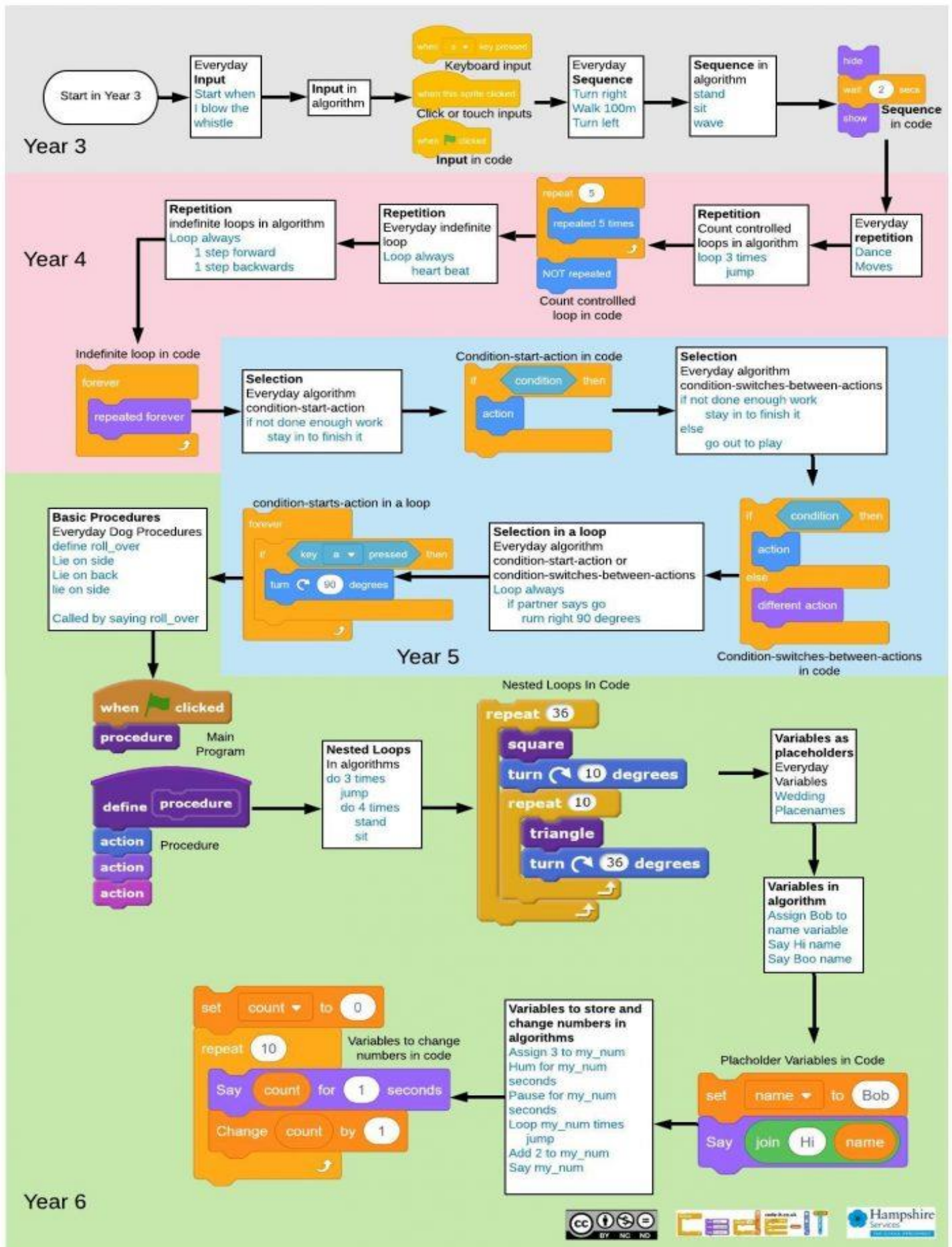
Computer Science - programming

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> Understand that an algorithm is a sequence of instructions which can be programmed on a digital device. 	<ul style="list-style-type: none"> Follow simple algorithms to make things happen. Debug programs with support so they run correctly. 	<ul style="list-style-type: none"> Write and share simple algorithms for others to follow. Debug programs with a little support so they run correctly. 	<ul style="list-style-type: none"> Use logical reasoning to write simple algorithms explaining the sequence commands should run in. Program a sequence of actions using timings to create a simple animation. Write code that includes conditional events (e.g. run commands when objects hit). Debug programs independently so they run correctly. 	<ul style="list-style-type: none"> Use logical reasoning to create simple flowcharts explaining the sequence commands should run in. Test, debug and improve programs with support. 	<ul style="list-style-type: none"> Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation To use condition start-action in code To use condition switches between actions in code Start to use condition-starts-action in a loop code 	<ul style="list-style-type: none"> Can independently understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation To use nested loops in code To use variables within code <p>Extension</p> <ul style="list-style-type: none"> To learn how to write code using a text-based language (e.g. Python and/or HTML). Detect and correct errors in programs (syntax and logical bugs).
Summary of core progression in Computer Science						
	Children initially moving themselves to	Children progress from simple routes to include	We use microbits to understand simple elements of block	Pupils develop their understanding of flowchart algorithms	Pupils use loop if functions	Pupils use variables within their codes.

	<p>understand how to follow a simple algorithm. They then program a simple route for a Kubo to follow</p>	<p>subordinate routes. Children move onto thinking about loop routes which is where they end up in year 5 with loops in block coding</p>	<p>code- They code LED lights to link with art work and flashcards for learning numbers in a foreign language – develop the wait command</p>	<p>(links with: science and conductivity; volcanoes topic)</p>		<p>They learn to use repeated if functions.</p>
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See table below for KS2 progression

KS2 Progression in coding





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Digital Literacy

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> • Navigate around websites with guidance. • Know where to go for help or support when online. 	<ul style="list-style-type: none"> • Know how to use a web browser to navigate a website when doing Internet research. • Search for sensible, suitable images online. • Know rules for staying safe online, including how to safely use Internet media players. 	<ul style="list-style-type: none"> • Know how to use a web browser to navigate websites effectively when doing Internet research. • Search for sensible, suitable images online and insert them into a document. • Know rules for staying safe online and why they must be followed. 	<ul style="list-style-type: none"> • Compare digital communication methods, including when they are appropriate to use. • Explain the features of a strong password. • Understand how to stay safe when playing computer games. 	<ul style="list-style-type: none"> • Learn how to search the web effectively. • Learn about the importance of only joining and using child-friendly websites. • Understand that there are consequences for making bad decisions online. 	<ul style="list-style-type: none"> • Compare a range of online sites for doing Internet research on. • Cross-reference search results to help validate information on them. • Describe online hazards and how to respond to them safely. • Understand the term 'digital footprint' and describe strategies for reducing it. • Know how to stay safe when watching and recording videos online. • Compare techniques used for manipulating and putting pressure on people online. • Understand how to safely send digital messages. 	<ul style="list-style-type: none"> • Learn how to evaluate the usefulness of a website. • Discuss reasons for and against sharing material publicly online. • Understand the importance of online consent. • Learn how to safely share images online. • Research localities using a digital map and use advanced tools like route finders. • To plan their own school trip to Wellington College.

Summary of core progression in Digital Literacy

E-safety week to highlight what is covered and talked about every time child go on line. Child e-safety chart developed by the school council to constantly be shared during these sessions <https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s>

Year Reception - Long term overview

Information Technology	Computer Science - programming	Digital Literacy
<ul style="list-style-type: none"> Learn to type letters with increasing confidence using a keyboard. Explore combining painting tools to make digital art. Use ICT hardware to interact with age-appropriate computer. Learn to dictate short, clear sentences into a digital device. <p>Useful Apps Seesaw, Word, Pages Google Docs Pic Collage,</p>	<ul style="list-style-type: none"> Understand that an algorithm is a sequence of instructions which can be programmed on a digital device. To initially be able to direct a person around a maze Initially starting with a simple coding app to direct a mole (sprite) to its hole To be able to create a simple route with the Kubo <p>Learn how to drag and drop https://studio.code.org/s/pre-express-2019/stage/1/puzzle/1</p> <p>Simple follow code https://studio.code.org/s/pre-express-2019/stage/2/puzzle/1</p>	<ul style="list-style-type: none"> Navigate around websites with guidance. Know where to go for help or support when online.

Year 1 Long term overview

Information Technology	Computer Science - programming	Digital Literacy
<ul style="list-style-type: none"> Learn how to type words quickly and correctly using a keyboard. Learning to : -use the space bar to make space and delete to delete letters/words -make a new line using enter/return -dictate into a digital device more accurately and with punctuation. 	<ul style="list-style-type: none"> Following the Kubo KS1 curriculum lessons (4 x 25minute lessons) https://kubo.education/lesson-plan-1/ Follow simple algorithms to make things happen. Initially children will use their body to understand the Movement TagTiles <p>Children will use the Kubo to:</p>	<ul style="list-style-type: none"> Know how to use a web browser to navigate a website when doing Internet research. Research for at least one of the topics they are looking at through the year Search for sensible, suitable images online.

<ul style="list-style-type: none"> Children will type into computers to initially learn to log on They will use activities on the following website https://www.everyschool.co.uk/i.c.t.-key-stage-1-navigation-skills.html This will develop valuable computer navigation skills. They will develop mouse, keyboard, scrollbar and drag and drop skills. Make simple word processed documents and change the appearance of text. Children will make simple documents to link in with their writing They will repeat and refine these skills when making greetings cards. Use and combine a variety of painting tools to create a picture. Children will use painting tools to create cards to fit in with key celebrations <p>Useful Apps Seesaw, Word, Pages Google Docs Pic Collage, Book Creator,</p>	<ul style="list-style-type: none"> -Demonstrate how Movement TagTiles work to create a simple algorithm -Make routes for KUBO to follow on the activity map. Debug programs with support so they run correctly. Through the unit of lessons children will need to make adjustments to their algorithms to guide the Kubos through the maps <p>Progression in the objective https://kubo.education/lesson-plan-2/ By the end of this section, students should be able to: - Make a function. -Explain your functions to classmates. - Come up with stories to fit your functions. -Explain how your classmates' functions work. Work with functions to : Make KUBO “memorize” the route to the soccer ball by using the blue function and play tiles Choose a route and make a function to take KUBO from the school bell to the bus stop using the blue Record and Play Function tiles. To embed skills and enter into long term memory (lessons 3 to 6) https://studio.code.org/s/pre-express-2019/stage/3/puzzle/1 https://studio.code.org/s/pre-express-2019/stage/4/puzzle/1 </p>	<p>These might be images for the cards they make or the word-processed documents they make</p> <ul style="list-style-type: none"> Know rules for staying safe online, including how to safely use Internet media players. E-safety week to highlight what is covered and talked about every time child go on line. Child e-safety chart developed by the school council to constantly be shared during these sessions https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s
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Information Technology	Computer Science - programming	Digital Literacy
<ul style="list-style-type: none"> • Make word processed documents combining images with text. <ul style="list-style-type: none"> - I can copy and paste images and text -Use caps locks for capital letters -Further develop speed and accuracy with typing This might be through writing up a piece of their English or Topic writing where images can be added • Change the appearance of text so it matches a document's theme. As above – for example if they were to write up some writing about The Great Fire of London, they might change the font to match the era or the colour of headings to resemble fire • Use and combine a variety of brush styles and painting tools to create a picture. Create a multimedia e-book combining: text, painted pictures <p>Useful Apps Seesaw, Word, Pages Google Docs Pic Collage, Keynote Book Creator, Popplet</p>	<ul style="list-style-type: none"> • Write and share simple algorithms for others to follow (Children are reminded of the algorithms created in Year 1 and again use their bodies to remind themselves about the instructions needed to move and program a robot) <p>Following the Kubo KS1 curriculum lessons (4 x 25minute lessons) https://kubo.education/lesson-plan-3/ By the end of this section, students should be able to: Build subroutines within functions. Explain your subroutines to classmates. Come up with stories to fit your subroutines. Explain how your classmates' subroutines work</p> <p>Debug programs with a little support so they run correctly.</p> <p>https://kubo.education/lesson-plan-4/</p> <ul style="list-style-type: none"> • By the end of this section, students should be able to: Explain what a loop is. Make a function that includes a loop. Design a new map for KUBO. Write a story. Program KUBO to do what the story describes. <p>These are the early foundations of what is built on in Year 5 with loop codes in block coding.</p>	<ul style="list-style-type: none"> • Know how to use a web browser to navigate websites effectively when doing Internet research. Research for at least one of the topics they are looking at through the year • Search for sensible, suitable images online and insert them into a document. These might be images for the fact books or writing project they make or the word processed documents they create • Know rules for staying safe online and why they must be followed. E-safety week to highlight what is covered and talked about every time child go on line. Child e-safety chart developed by the school council to constantly be shared during these sessions https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s

	<p>To embed skills and enter into long term memory (lessons 7 to 10) https://studio.code.org/s/pre-express-2019/stage/7/puzzle/1</p>	
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Year 3 - Long term overview		
Information Technology	Computer Science - programming	Digital Literacy
<ul style="list-style-type: none"> Type text into different programs and change its style by applying a range of font effects. <p>Increasing speed and accuracy with typing: -use index fingers on keyboard home keys (f/j) -use left fingers for a/s/ d/f/g, and use right fingers for h/j/k/l - edit the style and effect of my text and images to make my document more engaging and eye-catching. For example, borders and shadows. -use cut, copy and paste to quickly duplicate and organise text.</p> <ul style="list-style-type: none"> Create documents and posters by combining text boxes with inserted images. Create a multimedia e-book combining: text, images voice recordings and shapes. 	<ul style="list-style-type: none"> Use logical reasoning to write simple algorithms explaining the sequence commands should run in. Program a sequence of actions using timings to create a simple animation. Write code that includes conditional events (e.g. run commands when objects hit). Debug programs independently so they run correctly. <p>https://microbit.org/lessons/nature-art-unit-of-work/ - 4 lessons They create nature representations, firstly using art materials and are introduced to computational thinking and programming the LEDs on the micro:bit.</p> <p>Pupils recap their understanding of algorithms before writing their own algorithms to show how they created their nature representations.</p> <p>Pupils are introduced to the BBC micro:bit and how images can be created using the LEDs. They create visual algorithms to plan simple images before writing programs using the MakeCode editor to create their images. https://microbit.org/lessons/digital-flashcards-unit-of-work/ -</p>	<ul style="list-style-type: none"> Compare digital communication methods, including when they are appropriate to use. Explain the features of a strong password. Understand how to stay safe when playing computer games. <p>E-safety week to highlight what is covered and talked about every time child go on line. Child e-safety chart developed by the school council to constantly be shared during these sessions https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s</p>

<ul style="list-style-type: none"> • Shoot a digital photo and explore tools to edit it. • Create my own sorting diagram and complete a data handling activity with it using images and text. • Start to input simple data into a spreadsheet. • Create a feelings chart exploring a story or character's feelings <p>Useful apps Seesaw, Word, Pages Google Docs Keynote Book Creator, Popplet Google Sheets, Google Forms, Excel, Numbers,</p>	<p>This builds on the previous 4 lessons Pupils design sequenced algorithms for flashcards to help them learn numbers in a foreign language, developing their understanding of computational thinking. They then write programs to create digital flashcards using micro:bit and test and evaluate their work. Pupils develop their understanding of the 'wait' command, using it in algorithms. They then plan an algorithm for a digital number flashcard. Pupils program the BBC micro:bit as a digital number flashcard and evaluate their programs against the design criteria before reviewing their learning from this unit. To embed – lessons 11 and 12 https://studio.code.org/s/pre-express-2019/stage/11/puzzle/3</p>	
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Year 4 - Long term overview		
Information Technology	Computer Science - programming	Digital Literacy
<ul style="list-style-type: none"> • Type and design a variety of documents, posters and leaflets using ICT. Learn rules for creating neat word processed work. • Confidently and regularly use text shortcuts such as cut, copy and paste and delete to organise text • Use font sizes appropriately for audience and purpose. • Use spell check and thesaurus including through Siri and other AI technology 	<ul style="list-style-type: none"> • Use logical reasoning to create simple flowcharts explaining the sequence commands should run in. https://microbit.org/lessons/electrical-conductors-unit-of-work/ Pupils develop their understanding of flowchart algorithms, selection and inputs and outputs by using electrical circuits and the BBC micro:bit to test the conductivity of different materials. 	<ul style="list-style-type: none"> • Learn how to search the web effectively. • Learn about the importance of only joining and using child-friendly websites. • Understand that there are consequences for making bad decisions online. <p>E-safety week to highlight what is covered and talked about every time child go on line. Child e-safety chart developed by the school council to constantly be shared during these sessions</p>

<ul style="list-style-type: none"> • Produce a multimedia video topic about topic with music and narration. • Create online multiple-choice quizzes. • Shoot and edit digital photos effectively. Create a photo collage. • Create a word collage. • Create my own online multiple choice questionnaire. • Input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, pie charts. • Understand how data is collected. <p>Useful apps Seesaw, Word, Pages Google Docs Keynote Book Creator, Popplet Google Sheets, Google Forms, Excel, Numbers, Kahoot</p>	<p>Pupils learn how to use the BBC micro:bit's pins as inputs. They plan, write, test and debug MakeCode programs to use micro:bits to test the electrical conductivity of materials.</p> <p>Test, debug and improve programs with support.</p> <p>https://microbit.org/lessons/volcano-animations-unit-of-work/</p> <p>Programming activities related to animations, pupils develop their understanding of decomposition, flowchart algorithms and repetition. They then write, program and test an animation showing volcanic eruption using the LEDs on the micro:bit.</p> <p>Children learn to write a program using the BBC micro:bit MakeCode editor and explore how repetition can be used to create an animation.</p> <p>Pupils then follow their algorithm and write a program to create their volcanic eruption animation using the MakeCode editor.</p> <p>Test, debug and improve programs with support but beginning to be more independent.</p>	<p>https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s</p>
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Year 5 - Long term overview		
Information Technology	Computer Science - programming	Digital Literacy

<ul style="list-style-type: none"> • Enter formulae into a spreadsheet to solve calculations and model scenarios, including using =SUM() and statistical functions. • Change the format of cells of cells using: text alignment, borders and data types. <p>Children develop the excel spreadsheet skills to record a data handling project</p> <ul style="list-style-type: none"> • Create pictures using drawing tools (shapes). • Create a multimedia on-screen presentation over several slides, adding animation and transition effects to enhance it. <p>Children design and make a multi-media presentation about a learning topic or them self.</p> <ul style="list-style-type: none"> • Compare ways for manipulating digital images to enhance them. <p>Useful Apps Seesaw, Word, Pages Google Docs Keynote Book Creator, Popplet</p> <p>Google Sheets, Google Forms, Excel, Numbers,</p>	<ul style="list-style-type: none"> • Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation • To use condition start-action in code • To use condition switches between actions in code <p>Start to use condition-starts-action in a loop code</p> <p>https://microbit.org/lessons/musical-microbit-unit-overview/ Pupils compose musical phrases and write algorithms to play their phrases on pitched instruments (e.g. glockenspiels).</p> <p>They then programme the micro:bit to play their phrases when events are triggered and and experiment with using the accelerometer. Finally, they consider whether the micro:bit can be used as a music-making device, especially for those who might not have access to instruments.</p> <p>Pupils learn to use the if-then function and loop code instructions.</p> <p>https://microbit.org/lessons/data-handling-unit-summary/ Children write and evaluate algorithms and programs using selection and repetition to use micro:bit as a temperature recorder, an automatic warning system and a digital assistant.</p> <p>Loops and conditionals in coding (lessons 6-15) https://studio.code.org/s/express-2019</p>	<ul style="list-style-type: none"> • Compare a range of online sites for doing Internet research on. • Cross-reference search results to help validate information on them. • Describe online hazards and how to respond to them safely. • Understand the term ‘digital footprint’ and describe strategies for reducing it. • Know how to stay safe when watching and recording videos online. • Compare techniques used for manipulating and putting pressure on people online. • Understand how to safely send digital messages. <p>E-safety week to highlight what is covered and talked about every time child go on line. Child e-safety chart developed by the school council to constantly be shared during these sessions https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s</p>
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Year 6 - Long term overview

Information Technology	Computer Science - programming	Digital Literacy
<ul style="list-style-type: none"> • Write spreadsheet formulae to solve maths problems (e.g. unit convertors). • Create an on-screen presentation with slide transitions, advanced animation effects and action buttons. Applying other useful effects to documents such as hyperlinks; importing sounds to accompany and enhance the text in the document. • Edit images using layering techniques. <p>Use this skills to create interactive powerpoint games about a book they are reading (Stormbreaker)</p> <ul style="list-style-type: none"> • Be able to create tables and venn diagrams – use this skill to record their learning in a variety of subjects • Create and edit a video. <p>This will come through in a number of learning contexts – revision tool for SATs, end of year video, school prospectus - presentation about our school – using the format of adobespark (This may change to an app with the introduction of ipads)</p> <p>Useful Apps Seesaw, Word, Pages Google Docs Keynote Book Creator, Popplet</p> <p>Google Sheets, Google Forms, Excel, Numbers</p>	<ul style="list-style-type: none"> • Can independently understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation • To use nested loops in code • To use variables within code <p>https://microbit.org/lessons/getting-active-unit-overview/</p> <p>They are introduced to variables and develop their understanding through a mixture of unplugged and practical programming activities. Pupils design and program the micro:bit to be a star-jump and step counter and a family activity selector.</p> <p>They learn to use repeated if functions</p> <p>Samsung energy project – to use microbits to code smart devices</p> <p>Variables and Loops lessons (lessons 19 -23) https://studio.code.org/s/express-2019</p>	<ul style="list-style-type: none"> • Learn how to evaluate the usefulness of a website. • Discuss reasons for and against sharing material publicly online. • Understand the importance of online consent. • Learn how to safely share images online. • Research localities using a digital map and use advanced tools like route finders. To plan their own school trip to Wellington College. <p>E-safety week to highlight what is covered and talked about every time child go on line. Child e-safety chart developed by the school council to constantly be shared during these sessions https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s</p>



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