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	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
EYFS	**Understanding the world:** Talk about members of their immediate family and community. Name and describe people who are familiar to them- basic elements of who they trust and who are strangers Maths - counting apps E-safety stories - Daisy Chain animated story; Little Red Riding Hood and The Wooly Sheep; PenguinPig	**PSED:** Increasingly follow rules without adult reminders. Taking photographs/videos on a camera/iPad Using magnifying apps to discover the environment outside- minibeasts/plants etc.	**Physical Development:** Know and talk about different factors that support their overall health and wellbeing; regular personal activity; healthy eating; toothbrushing; sensible amounts of screen time; good sleep routine; being a safe pedestrian. **Maths:** Geometry - shape and space - positional/directional language with a beebot. **Understanding the world:** Show interest in different occupations. Role-playing occupations - old typewriters/keyboard	**PSED:** Shows understanding that good practices with regards to exercise, eating, sleeping and hygiene can contribute to good health **PSED:** Show resilience and perseverance in the face of challenge. Using recording devices/recording buttons to answer questions/retell a story etc.	**PSED:** Explain the reasons for rules, know right from wrong and try to behave accordingly. **Expressive arts and design:** Draw with increasing complexity and detail, such as representing a face with a circle and including details - drawing apps on iPads/Art Doodle **Expressive arts and design:** Explore, use and refine a variety of artistic effects to express their ideas and feelings - drawing apps on iPads/Art Doodle **Being imaginative and expressive:** Play instruments with increasing control to	**Expressive arts and design:** Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function - drawing apps on iPads/Art Doodle/Mini Mash

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			and mouse- discovery of a computer/laptop		express their feelings and ideas	
	AUTUMN 1 – Digital Literacy	**AUTUMN 2 – Computer Science**	**SPRING 1 – Information Technology**	**SPRING 2 – Digital Literacy**	**SUMMER 1 – Computer Science**	**SUMMER 2 – Information Technology**
1	**E-Safety** Autumn 1 introduces the children to what personal information is and the importance of keeping this information safe. Children develop their understanding of what the e-safety rules are and the purpose of them.	**BeeBots Coding** Children will learn what the term 'algorithm' means and the different ways we can create instructions. Children to use a Beebot to explore following, inputting, creating and predicting the destination of a programmable toy that uses algorithms.	**Digital artwork** Spring 1 teaches children how they can create digital artwork using a laptop or an iPad. Children find ways to make changes to the tools they are using- font, colour, paintbrush etc. Children begin to look at simple word processing by typing a sentence to match their picture.	**E-Safety** Children understand which information to keep private, but further develop this understanding where they explicitly look at the benefits and risks of sharing personal info online. Children begin to understand the emotions they feel online and develop ways to manage difficult emotions, including who to ask for help.	**Introduction to block coding** Children to transfer their knowledge of programmable toys to simple movement of a sprite on the computer. Children to explore how they can create a background for their coding and make the sprite move to a place they would like it to go using the when clicked block.	**Grouping Data** Children to look at ways we can put objects into groups and label them to make it easier to find. Children to explore properties for sorting and answer questions about their data.
2	**E-Safety** Autumn 1 builds upon children's previous knowledge of the benefits of technology and children explore the different ways the Internet can be used. Children understand the	**Beebot Coding including debugging** Children develop their understanding of coding a physical programmable toy to create their own bee bot mat with various destinations. Children	**Digital writing** Spring 1 teaches children the way we can use a camera to take and manipulate photographs to edit them. Children look at the different processes that go into taking a	**Pictograms/bar graphs** Children to look at ways we can collect, record and present data on a computer using a range of different graphs, including a pictogram and a bar graph.	**Introduction to block coding** Children develop their understanding of different ways you can code a sprite to move using buttons on the keyboard. Children to begin to make a short	**Creating music** Children will be taught how we can create music on a computer. Children will explore digital music and combine sounds that create a variety of different effects.

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	importance of staying safe online and can identify what to do when situations arise and who they can ask for help.	create their own algorithms using their understanding and begin to debug and correct algorithms that are not efficient/effective or are not accurate.	photograph- portrait/landscape, zoom, focusing etc before evaluating their photo and choosing effective edits to improve. Children to use their image in a simple poster that incorporates and builds upon word processing skills from previous year.	Children to type a simple sentence about the findings that they found out about from their data collection – related to previous skills.	coding story using collision detection and include sounds to make their coding more exciting.	Children will find ways to manipulate their sounds to express different emotions. Children will share their music and compare the difference between music in person and digital music, giving their own opinions and evaluations.
3	**E-Safety** In Autumn 1, children explore what respectful, positive use of the Internet is and understand when the appropriate times are to report things they see or experience online. Children begin to experience reasons why information or image is altered online and begin to think about the accuracy of it.	**Basic movement in block coding** Children transfer their prior knowledge of physical coding and algorithms to begin to code using block codes on a computer. Children explore the function of different coding blocks and begin to plan short codes in a storyboard.	**Stop motion animation** Spring 1 teaches children how to use stop motion animation to create a physical animation through the process of taking photos of a physical object moving for effect. Children to plan their stop motion animation, create it and evaluate its effectiveness at the end. Children to look at the process of onion skinning to create a seamless animation.	**E-Safety and Branching Databases** Children understand the function of age restrictions and can explain the importance of these in keeping us safe. They know why it is important to abide by these restrictions to keep safe and why it might be inappropriate to ignore them. Children will understand what a branching database is and how they can use yes/no questions to sort groups of objects. They will be able to create a	**Debugging and efficiency in coding** Children begin to explore what they can do if their code does not work- children begin to solve basic debugging issues. Children continue developing their understanding of more complicated codes using a variety of different blocks to replicate a project with their own twist. Blocks include: timer and repeat block.	**Digital presentation** In Summer 2, children in year 3 will look at present knowledge and information they have learned in a presentation on the computer. Children will be taught how they can combine their skills from previous years such as typing, inserting images and shapes to create an exciting presentation. Children will be taught how to insert slides, add a background, add sounds, transitions and

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				physical and on-screen branching database and will test them to check if they work or not.		animations to improve their presentations.
4	**E-Safety** Autumn 1, children build upon their idea of using information for different reasons and begin to understand how to search effectively. Children understand the way online adverts work and how this can impact our searching and the accuracy of information we find,	**Introduction to text-based coding** Children apply knowledge of coding to a different program - Logo - which use text-based coding. Children to use shorthand coding to make a turtle move. Children explore how to make their coding more efficient using loops to create a desired project- piece of artwork.	**Digital Audio Recording** Children look at different ways they can present digital learning to previous years. Children create short audio recording. Children to edit their digital recordings by on a simple editing software.	**E-Safety and Photo Editing** Children to be informed about some of the specific dangers that they may face with identity theft and spam emails that may cause dangerous malware or computer virus. Children will develop their understanding of photographs from year 2 to look at ways digital images can be edited and changed. They will look at the way editing photographs can have different impacts. Children will edit photographs and evaluate the effectiveness of their choices.	**Keyboard input in coding** Children to begin to see how codes can be used to respond to a computer user by using keyboard input. Children to begin to explore basic variables and consolidate their understanding of previous blocks to create a simple short animated story.	**Data collection in Excel** Children develop their understanding of data collection and find ways that they can use Excel to input data into a program. Children to begin to look at how they can use the cells to create tables to present information. Children will be taught about basic formula to make their data collection more efficient.
5	**E-Safety** In Autumn 1, children develop a greater awareness of the information they are	**Block coding with different coding blocks** Children build upon their previous understanding of coding	**Databases** Children will develop their understanding of using a computer program to organise data from year 4 and look at the way we can use databases (2Investigate) to organise data in records. Children		**Physical Coding** Children will apply their knowledge of coding to physical coding programme using	**Video editing** Children will look at ways that they can develop the skills of capturing, editing and

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	exposed to and viewing and develop strategies that they can use to evaluate the reliability of search results. Children begin to make informed decisions about the information they view online- specific to fact, opinion and bias – recognising safe or unsuspicious content.	and are introduced to new coding blocks to make their coding more sophisticated, simple variables, if/else, timers and buttons to vary the projects they create.	will be taught to use tools within a database to order and answer questions about data. **E-Safety** Children will learn about the ways in which devices collect and store information about them such as location and the risks of this in everyday life. Children to also look at the reasons for digitally altered photos online and the mental impact of this.	Crumble kits. They will use the microcontroller and learn how to connect different program components. They will learn about conditions to control the flow of actions using the if/then structure.	manipulating video to create short videos that suit a purpose. Children will develop their knowledge of camera angles and the effectiveness of this in recording a video. Children plan their video concept, record and edit to create a final product. Children will have an opportunity to reflect on and assess their progress throughout in creating a video.
6	**E-Safety** In Autumn 1, children explore the reasons why people communicate online and develop a deeper understanding of the motives behind communication- manipulating people's thoughts, ideas and opinions. Children will develop a better understanding of what is meant be 'consent' and ways we give	**Block coding with different coding blocks** Children develop their understanding of a range of coding projects by looking at the way variables can be used in different ways. Children to use/modify/create variables to create their own independent project. Children to design, code, debug and evaluate their independent project.	**Website building** Children combine their previous knowledge of creating digital content to design and create a website. Children understand how to use a variety of tools to create the look of their webpage and learn about how to use hyperlinks to navigate through a number of webpages. Children to evaluate and suggest changes to their website. **E-Safety** Children develop their idea of a digital footprint and explore how it can be manipulated by the things that we share to create a virtual image of ourselves online. Children will explore the reasons why people create a virtual image and share inappropriate content. Children will learn about the importance of balancing screen time with	**Independent coding project** In Summer 1, children will explore the way we can use functions in our codes. Children will have the freedom to be able to choose the software they want to use and explain their choices for why. Building upon previous learning, children will design their own brief for a project that they can use to control a	**3D modelling** Children will develop their knowledge and understanding of using a computer to create a 3D model. Children will look at ways they can adapt 3D models to secure their understanding before making their own accurate models of physical objects. Children plan, develop and evaluate their own 3D model.

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	consent for information to be shared/stored online.		other activities and the impact screen time has on our mental wellbeing.	physical simulation using a previous idea and adapting to make their own project.	