

| | Nursery | Year R | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| Autumn 1 | Throughout Caterpillars and Butterflies our children explore using buttons and seeing how they make things work. | What does technology look like? Children will have the chance to explore different devices, both working and unplugged. | Computing Systems Children will learn about technology and how it can help them. | Technology around us Children will learn about IT in home, school and social places such as libraries and shops. | Connecting Computers Children will be introduced to inputs, outputs and processes and explore different computer networks. | The Internet Children will build of their knowledge of networks and the importance of keeping them secure (including the World Wide Web). | Sharing information Children will learn how information is transferred between systems and devices. | Communication Children will explore how data is transferred over the internet. |
| Autumn 2 | | Digital Mark Making Children will be able to explore paint and drawing programs on different devices. | Digital painting Children will be looking at using different digital art and using a range of tools. | Robot Algorithms Children will build on the commands they can give robots and investigate how the order can affect the outcomes. | Desktop Publishing Children will build on their knowledge of text and images and consider their choices on fonts, colours, and size to edit and improve documents. | Repetition in Shapes Children will use programming and repetition to create shapes and patterns. | Video Production Children will learn how to create short videos through capturing, editing and manipulating video technologies. | Web Page Creation Children learn to create a website for their chosen purpose. |
| Spring 1 | Children also explore different digital devices (unplugged) within their role play areas. Children have use of tablets, kindles and other technology devices to support their learning in all areas of Early years. | Introduction to Robots Children will have the opportunity to explore and use different floor robots. See how they move and give them commands using the buttons. | Digital Writing Children will learn to create and change text using keyboards and a range of tools | Presentations Children will learn to create PowerPoints using images and text. | A sequencing sounds Children will be introduced to Scratch and will create their own sounds, motions and sequences. | Photo Editing Children will build on their understanding of how digital images can be edited, resaved and reused. | Flat-file databases Children will explore flat-file databases and how they organise data. They will create and use graphs to answer questions about the data. | Variable in games Children will continue to build on their knowledge of scratch. They will use variables and create their own projects. |
| Spring 2 | | Sorting and representing simple data. | Grouping Data Children will learn about data and information. | Pictograms Children will build on their understanding of data and how it can be collected and organised | Branching Databases Children will understand and create branching databases to answer yes and no questions to group their data. | Audio Production Children will build on their knowledge of input and output devices required to work with sound. | Vector graphics Children will be introduced to vector drawings and how to created them using different tools. | Spreadsheets Children will be introduced to spreadsheets and organise their data into columns and rows. They will also create their own data. |
| Summer 1 | Early Computer science is also explored through play with Beebots and other floor robots. | Digital Mark making Children will revisit using paint software on different devices with adult led sessions. | . Moving Robots Children will learn to create and send commands to floor robots (BeeBots). | Digital Photography Children will learn about the different devices and tools used to capture and edit their own photographs. | Creating Animation Children will learn a range of techniques to create stop-frame animations on tablets. | Data logging Children will consider how and why data is collected. Children will collect their own data over long periods of time. | Selection in physical computing Children will learn and explore Crumble kits and how to command and connect them | 3D Modelling Children will learn to create 3D models to make, resize and duplicate objects. |
| Summer 2 | | Introduction to Robots. Children will revisit using floor robots (Beebots) with adult led sessions. | Programming Animations Children will be introduced to Scratch Jr. They will be making sprites, backgrounds and create simple programmes. | Programming quizzes Children will build on their knowledge of Scratch Jr to give commands and make predictions to make their own quizzes. | Events and actions in programming Children will build on their learning of sequencing to move a sprite in 4 directions and command them to draw lines of different colours. | Repetition in games Children will develop the use of scratch to design and create a game using repetition. | Selection in quizzes Children will build on their knowledge of selection to create quizzes with controlled outcomes. | Sensing movement Children will build on their KS2 knowledge to create different environments. Children will also link this to physical computing. |

