

Computing Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS Covered in continuous provision	Introduction to computers – using a mouse and clicking to make a selection (online jigsaws)	Key vocabulary related to computers – parts of the computer (online colouring) E-safety	Using computers for a purpose (simple phonics games)	Completing a simple computer programme/game (phonics and maths games)	Programming – positional language and BEEBOTS	Creating posters using Paint E-Safety
Year 1	Computing systems and networks – Technology around us Lesson objectives <ul style="list-style-type: none"> Technology in our classroom Using computer technology Developing mouse skills Using a computer keyboard Developing keyboard skills Using a computer responsibly 	Digital painting Lesson objectives <ul style="list-style-type: none"> How can we paint using computers? Using shapes and lines Making careful choices Why did I choose that? Painting all by myself Comparing computing art and painting 	Moving a robot Lesson objectives <ul style="list-style-type: none"> Buttons Directions Forwards and backwards Four directions Getting there Routes 	Grouping data Lesson objectives <ul style="list-style-type: none"> Label and match Group and count Describe and object Making different groups Comparing groups Answering questions 	Digital writing Lesson objectives <ul style="list-style-type: none"> Exploring the keyboard Adding and removing text Exploring the toolbar Making changes to text Explaining my choices Pencils or keyboard 	Programming animations Lesson objectives <ul style="list-style-type: none"> Comparing tools Joining blocks Making a change Adding sprites Project design Following my design
Prior Learning	Continuous provision using computers in the EYFS area. Year 2 – Information technology around us	Year 2 – Digital painting	Use of beetbots Year 2 – Robot algorithms Year 3 – Events and actions in programs		Use of games being used in continuous provision.	Year 4 – Events and actions in programs
Year 2	Information technology around us Lesson objectives <ul style="list-style-type: none"> What is IT IT in school IT in the world The benefits of IT Using IT safely Using IT in different ways 	Digital photography Lesson objectives <ul style="list-style-type: none"> Taking photographs Landscape or portrait? What makes a good photograph? Lighting Effects Is it real? 	Robot algorithms Lesson objectives <ul style="list-style-type: none"> Giving instructions Same but different Making predictions Mats and routes Algorithm design Break it down 	Pictograms Lesson objectives <ul style="list-style-type: none"> Counting and comparing Entering data Creating pictograms What is an attribute? Comparing people Presenting information 	Making music Lesson objectives <ul style="list-style-type: none"> How music makes us feel Rhythms and patterns How music can be used Notes and tempo Creating digital music Reviewing and editing music 	Programming quizzes Lesson objectives <ul style="list-style-type: none"> ScratchJr recap Outcomes Using a design Changing a design Designing and creating a program Evaluating
Prior Learning/future learning	Year 1 – Computer systems and networks – technology around us Year 3 – Computer systems and networks Year 4 – The internet	Year 1 – Digital painting	Year 1 – Moving a robot	Year 1 – grouping data Year 3 – branching databases	Year 3 – Sequence sounds Year 4 – Audio production	Year 5 - Selection in quizzes
Year 3	Computer systems and networks Lesson objectives <ul style="list-style-type: none"> Computer systems and networks Stop frame animations Sequencing sounds Branching databases Desktop publishing Events and actions in programs 	Stop frame animations Lesson objectives <ul style="list-style-type: none"> Can a picture move? Frame by frame What's the story? Picture perfect 2 Evaluate and make it great! Lights, camera, action! 	Sequence sounds Lesson objectives <ul style="list-style-type: none"> Introduction to Scratch Programming sprites Sequences Ordering commands Looking good Making an instrument 	Branching databases Lesson objectives <ul style="list-style-type: none"> Yes or no questions Making groups Creating a branching database Structuring a branching database Planning a branching database Making a dinosaur identifier 	Desktop publishing Lesson objectives <ul style="list-style-type: none"> Words and pictures Can you edit it? Great template Can you add content? Lay it out Why desktop publishing? 	Events and actions in programs Lesson objectives <ul style="list-style-type: none"> Moving a sprite Maze movement Drawing lines Adding features Debugging movement Making a project

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Prior Learning/ Future learning	Year 2 – Information technology around us Year 4 – The internet	Year 1 – Digital painting Year 2 – Digital photography Year 4 – Photo editing	Year 2 – Making music Year 4 – Audio production	Year 1 – grouping data Year 5 - Flat-file database	Year 1 - Digital writing	Year 1 – programming animations
Year 4	The internet Lesson objectives <ul style="list-style-type: none"> Connecting networks What is the internet made of Sharing information What is a website Who owns the web Can I believe what I read? 	Audio production Lesson objectives <ul style="list-style-type: none"> Recording sound Editing audio Planning a podcast Creating a podcast Combining audio Evaluating podcasts 	Repetition in shapes Lesson objectives <ul style="list-style-type: none"> Programming a screen turtle Programming letters Patterns and repeats Using loops to create shapes Breaking things down Creating a program 	Data logging Lesson objectives <ul style="list-style-type: none"> Answering questions Data collection Logging Analysing data Data for answers Answering my question 	Photo editing Lesson objectives <ul style="list-style-type: none"> Changing digital images Recolouring Cloning Combining Creating Evaluating 	Repetition in games Lesson objectives <ul style="list-style-type: none"> Using loops to create shapes Different loops Animate your name Modifying a game Designing a game Creating our games
Prior Learning/Future learning	Year 2 – Information technology around us Year 3 – Computer systems and networks Year 5 – Systems and searching	Year 2 – Digital photography Year 5 – video production	Year 5 – Vector drawing	Year 5 – Selection in physical computing Year 6 - Sensing	Year 1 – Digital painting Year 2 – Digital photography	Year 3 - Events and actions in programs Year 6 – Variables in games
Year 5	Systems and searching Lesson objectives <ul style="list-style-type: none"> Systems Computer systems and us Searching the web Selecting search results How search results are ranked? How are searches influenced? 	Video production Lesson objectives <ul style="list-style-type: none"> What is video? Filming techniques Using a storyboard Planning a video Importing and editing video Video evaluation 	Selection in physical computing Lesson objectives <ul style="list-style-type: none"> Connecting crumbles Combining outputs Controlling with conditions Starting with selection Drawing designs Writing and testing algorithms 	Flat-file database Lesson objectives <ul style="list-style-type: none"> Creating a paper-based database Computer database Using a database Using search tools Comparing data visually Databases in real life	Vector drawing Lesson objectives <ul style="list-style-type: none"> The drawing tools Creating images Making effective drawings Layers and objects Manipulating objects Creating a vector drawing 	Selection in quizzes Lesson objectives <ul style="list-style-type: none"> Exploring conditions Selecting outcomes Asking questions Designing a quiz Testing a quiz Evaluating a quiz
Prior learning/ future learning	Year 3 – Computer systems and networks Year 4 – The internet Year 6 – Communication and collaboration	Year 2 – Digital photography Year 4 – Audio production	Year 6 - Sensing	Year 1 – grouping data Year 3 – branching database	Year 4 – Repetition in shape	Year 2 - Programming quizzes
Year 6	Communication and collaboration Lesson objectives <ul style="list-style-type: none"> Internet addresses Data packets Working together Shared working How we communicate Communicating responsibly 	Creating Media – Web page creation Lesson objectives <ul style="list-style-type: none"> What makes a good website How would you layout your webpage? Copyright or copywrong How does it look? Follow the breadcrumbs Think before you link 	Variables in games Lesson objectives <ul style="list-style-type: none"> Introducing variables Variables in programming Improving a game Designing a game Design to code Improving and sharing 	Introduction to spreadsheets Lesson objectives <ul style="list-style-type: none"> Collecting data Formatting a spreadsheet What’s the formula? Calculate and duplicate Event planning Presenting data 	3D modelling Lesson objectives <ul style="list-style-type: none"> Introduction to 3D modelling Modifying 3D objects Make your own name badge Making a desk tidy Planning a 3D model Making your own 3D model 	Sensing Lesson objectives <ul style="list-style-type: none"> The Mirco:bit Go with the flow Sensing inputs Finding your way Designing a step counter Making a step counter

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Prior learning	Year 3 – Computer systems and networks Year 4 – The internet Year 5 – Systems and searching		Year 3 - Events and actions in programs Year 4 – Repetition in games	Year 1 - Digital writing Year 3 – Desktop publishing		Year 5 – Selection in physical computing
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