Computing Curriculum 2023-2024

	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** • 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** • 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** • Buttons • Directions • Forwards and backwards • Four directions • Getting there • Routes	Grouping data **Lesson objectives** • Label and match • Group and count • Describe and object • Making different groups • Comparing groups • Answering questions	Digital writing **Lesson objectives** • Exploring the keyboard • Adding and removing text • Exploring the toolbar • Making changes to text • Explaining my choices • Pencils or keyboard	Programming animations **Lesson objectives** • 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** • 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** • Taking photographs • Landscape or portrait? • What makes a good photograph? • Lighting • Effects • Is it real?	Robot algorithms **Lesson objectives** • Giving instructions • Same but different • Making predictions • Mats and routes • Algorithm design • Break it down	Pictograms **Lesson objectives** • Counting and comparing • Entering data • Creating pictograms • What is an attribute? • Comparing people • Presenting information	Making music **Lesson objectives** • 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** • 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** • Computer systems and networks • Stop frame animations • Sequencing sounds • Branching databases • Desktop publishing • Events and actions in programs	Stop frame animations **Lesson objectives** • 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** • Introduction to Scratch • Programming sprites • Sequences • Ordering commands • Looking good • Making an instrument	Branching databases **Lesson objectives** • 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** • 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** • Moving a sprite • Maze movement • Drawing lines • Adding features • Debugging movement • Making a project

Computing Curriculum 2023-2024

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** • 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** • Recording sound • Editing audio • Planning a podcast • Creating a podcast • Combining audio • Evaluating podcasts	Repetition in shapes **Lesson objectives** • Programming a screen turtle • Programming letters • Patterns and repeats • Using loops to create shapes • Breaking things down • Creating a program	Data logging **Lesson objectives** • Answering questions • Data collection • Logging • Analysing data • Data for answers • Answering my question	Photo editing **Lesson objectives** • Changing digital images • Recolouring • Cloning • Combining • Creating • Evaluating	Repetition in games **Lesson objectives** • 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** • Systems • Computer systems and us • Searching the web • Selecting search results • How search results are ranked? • How are searches influenced?	Video production **Lesson objectives** • What is video? • Filming techniques • Using a storyboard • Planning a video • Importing and editing video • Video evaluation	Selection in physical computing **Lesson objectives** • Connecting crumbles • Combining outputs • Controlling with conditions • Starting with selection • Drawing designs • Writing and testing algorithms	Flat-file database **Lesson objectives** • Creating a paper-based database • Computer database • Using a database • Using search tools • Comparing data visually Databases in real life	Vector drawing **Lesson objectives** • The drawing tools • Creating images • Making effective drawings • Layers and objects • Manipulating objects • Creating a vector drawing	Selection in quizzes **Lesson objectives** • 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** • Internet addresses • Data packets • Working together • Shared working • How we communicate • Communicating responsibly	Creating Media – Web page creation **Lesson objectives** • 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** • Introducing variables • Variables in programming • Improving a game • Designing a game • Design to code • Improving and sharing	Introduction to spreadsheets **Lesson objectives** • Collecting data • Formatting a spreadsheet • What's the formula? • Calculate and duplicate • Event planning • Presenting data	3D modelling **Lesson objectives** • 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** • The Mirco:bit • Go with the flow • Sensing inputs • Finding your way • Designing a step counter • Making a step counter

Computing Curriculum 2023-2024

| 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 |