



Weddington Primary School - Computing overview



Key:

Online Safety	Computer Science	Information Technology	Digital Literacy	Assessment
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NB: Some units run between terms, therefore units of learning may not always be fully aligned with the schedule below.
The first computing lesson of each term always has an Online Safety theme.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	<u>Going Places Safely</u> <u>Project Evolve</u> <u>Knowledge Map</u> (group) <u>This is me</u> Explore how technology is used in daily life. Ongoing assessment of knowledge recorded. Children will know how to use an iPad to take photos	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Let's celebrate</u> Explore how technology is used in daily life. Ongoing assessment of knowledge recorded. Children will know how to type their name on an iPad	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Safer Internet Day</u> <u>National focus on safer use of the internet.</u> <u>Not all heroes wear capes</u> Explore how technology is used in daily life. Ongoing assessment of knowledge recorded. Children will know how to use a trackpad	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Long long ago</u> Explore how technology is used in daily life. Ongoing assessment of knowledge recorded. Children will know how to make digital art.	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>How does your garden grow?</u> Explore how technology is used in daily life. Ongoing assessment of knowledge recorded. Children will know how to programme a Bee Bot	<u>Project Evolve</u> Assess impact <u>Our world and beyond</u> Explore how technology is used in daily life. Ongoing assessment of knowledge recorded. Children will know how to dictate a question on Google



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Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year One	<u>Going Places Safely</u> <u>Project Evolve</u> <u>Knowledge Map</u> (group) <u>Introduction to Purple Mash</u> Safely exploring the various programs and options available. <u>Vocabulary</u> avatar, login, logout, password, file name, homepage, icon, save, 2Do <u>Data Explorers</u> Children develop mouse, keyboard and basic computing skills using creative tools. <u>Vocabulary</u> criteria, data, group, pictogram, sort	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Technology Around Us</u> Children will learn to define and understand what technology is by relating to its use at school, home, outside and in the wider world. <u>Vocabulary</u> device, digital technology, electronic, hardware, technology	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Safer Internet Day</u> National focus on safer use of the internet. <u>Creative Computing</u> Children develop their mouse, keyboard and basic computing skills using creative tools. <u>Discussions regarding the importance of developing these life skills.</u> <u>Vocabulary</u> arrow keys, digital art, drag and drop, hotspot, touchscreen gestures	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Making Beats</u> Children will use the tools 2Explore and 2Beat to make their own digital music. <u>Vocabulary</u> beat, compose, digital, musical instrument, tune	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Creating & Following Instructions</u> Children are introduced to the basis of logical thinking in preparation for coding. <u>Vocabulary</u> algorithm, coding, computer bug, debugging, instructions, program	<u>Project Evolve</u> Assess impact <u>Coding</u> Children will explore simple instructions and relate this to code blocks. By the end of this unit, children will be able to make a simple program. <u>Understand everyday applications of coding. Where possible, themed to topic learning.</u> <u>Vocabulary</u> action, algorithm, attribute, code, code blocks, code view, coding, command, debugging, design view, event, instruction, object, output, program, program design, programmer, scale, when clicked



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Year two	<u>Going Places Safely</u> <u>Project Evolve</u> Knowledge Map (group) <u>The Internet</u> Children will learn about the fundamentals of the internet, including its purpose, how we access it, and how to use it safely and effectively. They will explore the roles of browsers and search engines, websites and webpages and develop the skills needed to search for and evaluate information online. <u>Vocabulary</u> browser, home page, internet, keywords, link, modem, router, search bar, search engine, smart device, webpage, website, wi-fi, world wide web	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Questioning</u> Children will explore how to ask questions to collect useful information. They will learn to organise data using tally charts, pictograms, and simple branching databases to help sort and identify objects. <u>Vocabulary</u> branching database, closed question, data, grouping, open question, pictogram, primary data, sorting, tally chart, yes or no question	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Safer Internet Day</u> National focus on safer use of the internet. <u>Spreadsheets</u> Children will build confidence in formatting, carrying out simple calculations, using tools and creating block diagrams to present information clearly. <i>Children are reminded of real-life uses of spreadsheets and shown Excel and Sheets</i> <u>Vocabulary</u> apparatus, automatically, axis/axes, block diagram, cell, click & drag, column, controls toolbar, count tool, data, delete, edit, format, is equals tool, labels, quiz tool, resize, row, spreadsheet, title, value, wrap text	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Presenting Ideas</u> Children will use mind maps to organise and present their ideas <u>Vocabulary</u> concept map, connecting line, group, layer, node, present, title <u>Creating Pictures</u> Children will explore digital art creation through the use of a digital art tool. <u>Vocabulary</u> impressionism, outline, palette, pointillism, style	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Route Explorers</u> Children learn to build simple algorithms to move a screen turtle along routes. They consider direction and distances and create commands. <u>Vocabulary</u> algorithm, coding, command, computer bug, debugging, direction, instructions, route	<u>Project Evolve</u> Assess impact <u>Coding</u> Children will explore, modify and create programs that includes the use of timers and button objects. They will build on their testing and debugging skills to ensure programs work as expected. <i>Understand everyday applications of coding. Where possible, themed to topic learning</i> <u>Vocabulary</u> action, algorithm, attribute, bug, button object, collision detection, command, debug, debugging, event, object, output, program, program design, sequence, timer, when clicked, when key event, when swiped event



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Year Three	<u>Password safety</u> <u>Project Evolve</u> <u>Knowledge Map</u> (group) <u>Touch Typing</u> Children learn correct posture, finger positioning and typing techniques to develop speed and accuracy, while understanding how these skills support safe and effective computer use. <u>Relate to real-life careers and purposes.</u> <u>Vocabulary</u> bottom keys, home keys, keyboard, numbers row, posture, shift key, space bar, top keys, typing	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Email</u> Children will explore electronic communication using 2Email. They will learn how to respond to, compose and add attachments to emails as well as consider the safety aspects of email communication. <u>Explain the real-life relevance of learning this skill, including commonly used email programmes.</u> <u>Vocabulary</u> address book, attachment, communication, compose, email, email simulation, inbox, password, personal information, recipient, trusted contact	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Safer Internet Day</u> National focus on safer use of the internet. <u>Spreadsheets</u> Children learn to use formulae and functions to organise and analyse data effectively. <u>Explain real life uses and value of spreadsheets. Also show Sheets and Excel.</u> <u>Vocabulary</u> advanced mode, average, copy tools, data, formula, formula bar, formula wizard, function, max, merge cells, min, operations, problem solving, range, sheet, sum, total tools	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Presentations - Microsoft PowerPoint</u> Children will explore features of the presentation software then create and present their own slideshow presentations. <u>Discuss other programmes that are used for presenting.</u> <u>Vocabulary</u> animation, font, format, handles, image, Keynote, media, picture styles, PowerPoint, presenter notes, shape styles, slide, Slides, speaker, transition, word art	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Coding</u> Building on learning from previous coding units, children will explore timers, the repeat command and the importance of nesting code. They will build up to using design documentation to code a program. <u>Understand everyday applications of coding</u> <u>Discuss other programmes used for coding</u> <u>Where possible, themed to topic learning</u> <u>Vocabulary</u> action, alert, algorithm, attribute, button object, collision detection, debug, design, degrees, event, flowchart, interval, nested, nesting, object, output, procedure, repeat, right-angle, sequence, test, timer, turtle object	<u>Project Evolve</u> Assess impact <u>Micro: bits</u> Children are introduced to micro: bits and the coding program used to give them instructions to work. Children will explore how to make basic outputs occur from the micro: bit when inputs are detected. They will use Free Code micro: bit to write, test and transfer code to the micro: bit. <u>Consistently remind children of the relevance of their learning to real-life.</u> <u>Vocabulary</u> accelerometer, animation, data, gestures, hardware, image, infinite loop, input, led, output, program, repeat, selection, sequence, software, sound output, speaker



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Year Four	<u>Password safety</u> <u>Project Evolve survey</u> (Individual) <u>Effective Searching</u> Children learn to use search technologies effectively by selecting clear keywords, understanding how results are ranked, refining searches for accuracy, and evaluating online content to judge whether it is reliable and trustworthy. <u>Children made aware of other browsers that are available</u> <u>Vocabulary</u> balanced view, crawl, Easter eggs, exact match, fake news, filter, index, Internet, internet, key words, keywords, rank, refine, relevance, reliable source, reliability, results page, search bar, search engine, search engine, snippet, virtual assistant device, website	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Introduction to Artificial Intelligence</u> Children are introduced to Artificial Intelligence, exploring what it is, what it can do, and how it is used in today's digital world. They learn to write clear prompts to communicate effectively with AI tools, consider the responsibilities of being a good digital citizen when using them, and reflect on how AI might evolve in the future. <u>Vocabulary</u> artificial intelligence (AI), automation, data, digital citizenship, format, future technology, generative ai, human oversight, innovation, prediction, privacy, prompt, refine, reliable, responsible behaviour, trustworthy	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Safer Internet Day</u> National focus on safer use of the internet. <u>Sound Stories</u> Children will explore the features of effective audio books and work as a team to script, record and edit their own. <u>Vocabulary</u> audiobook, background music, edit, editor, final mix, playback, recording, sound effects, sound effects manager, sound technician, track, timeline <u>Unpacking Hardware & Software</u> Children will understand the role of hardware, the role of software and how they interact together to complete tasks. <u>Vocabulary</u> application (app), component, computer system, digital technology, electrical technology, hardware, input, manual technology, output, peripheral, process, program, software, storage, smart technology, technology	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Logo</u> Children are introduced to Logo programming, focusing on developing their understanding of basic commands and programming concepts. Children will learn to create shapes and letters using instructions that contain advanced features such as procedures. <u>Vocabulary</u> logo, logo commands, multi-line mode, pen down, pen up, procedure, repeat, setpc, setps	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Coding</u> This unit builds on learning from previous coding units. Children will learn to use selection, co-ordinates, looping and variables. They will use these coding skills to create their own game. <u>Consider many uses of coding in everyday life</u> <u>Vocabulary</u> action, alert, attribute, co-ordinates, event, flowchart, if statement, if/else statement, initialize, input, loop, object, random, repeat, repeat until, selection, sequence, tag attribute, timer, tinker, variable	<u>project evolve</u> assess impact <u>micro: bits</u> Children learn to code a micro: bit to make simulations of real-world tools such as dice and step counters. they will explore how logic can be coded into a micro: bit so that it can make decisions on what outputs it gives based on the inputs it receives. <u>consistently remind children of the relevance of their learning to real-life.</u> <u>vocabulary</u> accelerometer, data, gestures, if statement, if/else statement, infinite loop, light sensor, logic, selection, sensor, simulation, variable



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Year Five	<u>Password safety</u> <u>Project Evolve survey</u> (Individual) <u>Databases</u> Children will create their own databases as well as query existing databases to find information that they are being asked for. By the end of the unit, children would have explored single and multiple table databases to solve problems. <u>Vocabulary</u> condition, data, database, database design, edit, field, filter, group, linked tables, multiple tables, operator, query, record, sort, validation	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Word Processing - Microsoft Word Online</u> Children are introduced to word processing using Microsoft Word online version. Children will explore how to edit, format and create their own documents. <i>Discuss the other word processing solutions that are available.</i> <u>Vocabulary</u> border, bullet points, cell, column, copy, cut, document, editing, font, formatting, handles, image, image styles, page margins, page orientation, paste, picture styles, row, styles, table, text alignment, text wrapping, word processor	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Safer Internet Day</u> National focus on safer use of the internet. <u>Quizzing</u> Through exploring question types, adding creative features, and debugging, children will develop their technical skills and creativity while producing engaging quizzes for others to enjoy. <u>Vocabulary</u> advanced, content page, debug, design, evaluate, features, interactive, layout, multiple choice, quiz, simple, test, topic	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Spreadsheets</u> Children will use measurement conversions, graphing, weather analysis, budgeting, and planning a holiday, to learn how spreadsheets support real-world decision-making and problem-solving. <u>Vocabulary</u> axis/axes, budget, cell, column, continuous data, conversion, cost/expense, forecast, formula, formula wizard, function, income, line graph, meteorologist, millibar, plot/plotting, profit, row, trend, unit	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map <u>Micro: bits</u> Children will explore the use of the temperature sensor and pins on the micro: bit as well as sensors and inputs covered previously. Children will explore the use of variables, If Statements and events in their code to make meaningful projects. <i>Consistently remind children of the relevance of their learning to real-life.</i> <u>Vocabulary</u> data, electrical circuit, gestures, if statement, logic, pins, random, repeat, selection, sleep, variable	<u>Project Evolve</u> Assess impact <u>Coding</u> Children will learn about the importance of simplifying code, as well as how tags, functions and different variable types can be used within a program. <i>Consider many uses of coding in everyday life</i> <u>Vocabulary</u> abstraction, action, algorithm, computer generated variable, concatenation, datatype, decomposition, efficient, event, flowchart, friction, function, object, physical system, print to screen, sequence, simplify, simulation, string, sub-routine, tab attribute, variable



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Year Six	<u>Password safety</u> <u>Project Evolve survey</u> (Individual) <u>Blogging</u> Children explore blogs and their features, including how they can be used to engage an audience effectively. Children will plan and create their own blog post as well as commenting on other's blog posts. <u>Vocabulary</u> approval, blog, blog post, commenting, draft, edit, hyperlink, moderation, netiquette, plan, publish, revise, vlog	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map. <u>Networks</u> Children learn more about what networks are, what they do and how they connect devices. They also consider the safety aspects of networks, including the possible positive and negatives uses of networks. <u>Vocabulary</u> censorship, collaborate, email, filter, firewall, freedom of speech, internet, internet chat, lan, network, online safety, respectful communication, responsible use, router, video call, wan, web browser, website, wi-fi, world wide web <u>Data Detectives</u> Children work through an interactive set of databases challenges. They will interpret information being requested and query databases to find information. <u>Vocabulary</u> bar chart, calculate, condition, data, database, field, filter, group, line graph, linked tables, query, record, sort	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map. <u>Safer Internet Day</u> National focus on safer use of the internet. <u>Micro: bits</u> Children will create programs that use the micro: bit's pin input to create outputs when testing materials for conductivity. They will also explore using its sensors to collect data which will be presented automatically, when downloaded to 2Graph. <u>Consistently refer to the relevance of their learning within their everyday surroundings.</u> <u>Vocabulary</u> accelerometer, chart, conductivity, data, data logging, electrical circuit, LED, pins, sensor, sleep, variable	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map. <u>Spreadsheets - Microsoft Excel Online</u> This unit introduces children to spreadsheets using the Online version of Microsoft Excel. Children will explore how to create spreadsheets and use their functionality to support real-world decision-making and problem-solving. <u>Children also shown other solutions and the features commonly used in our adult lives</u> <u>Vocabulary</u> AVERAGE, cell, chart, chart labels, column, COUNT, COUNT IF, COUNTA, filter, formatting, formula, function, IF, MAX/MIN, row, sort, SUM, workbook, worksheet	<u>Project Evolve</u> Lesson in response to Autumn 1 Knowledge Map. <u>Coding</u> Children will learn how to use cloning and hotspots within their programs. They will use more complex flowcharts to help them test and debug existing simulations, building up to developing a text-based adventure game. <u>Vocabulary</u> abstraction, algorithm, attribute, clone, co-ordinates, concatenation, datatype, debugging, decomposition, design, draggable attribute, flowchart, function, hotspot, input, object, repeat over, repeat until, selection, simulation, sub-routine, text-based adventure, timer, tinker, user interface, variable	<u>Project Evolve</u> Assess impact <u>Binary</u> Children learn that all digital systems store and process information using patterns of 1s and 0s <u>Vocabulary</u> action, binary, bit, decimal, design, game states, integer, nanotechnology, object, transistor, variable