Cycle A National Curriculum Links

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Online Safety	Online Safety	IT*	IT*	Computer Science	Computer Science
EYFS	Book: Webster's Manners Use technology safely and respectfully. Know who to go to for help if something worrying hap- pens when using technology. Talking about good and bad choices in real life.	Book: Webster's Manners Use technology safely and respectfully. Know who to go to for help if something worrying hap- pens when using technology. Talking about good and bad choices in real life.	Using technology around the classroom to build on children's listening skills, curiosity, crea- tivity and problem solving. Explore technology to develop a familiarity with equipment and vocabulary.	Using technology around the classroom to build on chil- dren's listening skills, curios- ity, creativity and problem solving. Explore technology to devel- op a familiarity with equip- ment and vocabulary.	Easi-Cars Control technology and develop directional language. Share equipment and be re- spectful. Develop computational thinking.	Easi Cars Control technology and develop directional language. Share equipment and be respect- ful. Develop computational thinking.
1/2	Online Safety Book: Chicken Clicking NC Link: Use technology safely and respectfully, keeping personal infor- mation private; identify where to go to for help and support when they have concerns about content or contact on the internet or other online technologies.	Online Safety Book: Chicken Clicking NC Link: Use technology safely and respectfully, keeping personal infor- mation private; identify where to go to for help and support when they have concerns about content or contact on the internet or other online technologies.	IT* iMovie NC Link: Use technology pur- posely to create, organise, store, manipulate and retrieve digital content.	IT* iMovie NC Link: Use technology purposely to create, organ- ise, store, manipulate and retrieve digital content. Recognise common uses of IT beyond school.	Computer Science Bee-Bot NC Link: Understand what algo- rithms are; how they are imple- mented as programs on digital devices; and that programs execute by following clear in- structions.	Computer Science Espresso Coding NC Link: Implement programs on a digital device, input precise and unambiguous instructions. Create and debug simple pro- grams.
3/4	Online Safety Book: Troll Stinks NC Link: Use technology safely, respectfully and responsibly; recognise ac- ceptable/unacceptable behaviour; identify a range of ways to report concerns.	Online Safety Book: Troll Stinks NC Link: Use technology safely, respectfully and responsibly; recognise ac- ceptable/unacceptable behaviour; identify a range of ways to report concerns.	IT* Microsoft Word NC Link: Select, use and com- bine a variety of software (including internet services) to create content that accom- plishes given goals, including collecting, analysing, evaluating and presenting information.	IT* NC Link: Understand com- puter networks including the internet; how they can pro- vide multiple services, such as the world wide web.	Computer Science Espresso Coding NC Link: Use sequence, selec- tion and repetition in programs. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and pro- grams.	Computer Science Lego Education SPIKE Essential NC Link: Design, write and debug programs that accomplish specif- ic goals, including controlling or simulating physical systems. Detect and correct errors in algorithms and programs.
5/6	Online Safety Book: The Tech Tail NC Link: NC Link: Use tech- nology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns.	Online Safety Book: #Goldilocks NC Link: NC Link: Use tech- nology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns.	IT* Microsoft Office NC Link: Select, use and com- bine a variety of software (including internet services) to create content that accom- plishes given goals., including collecting, analysing, evaluating and presenting data.	IT* Microsoft Office NC Link: Select, use and combine a variety of soft- ware (including internet ser- vices) to create content that accomplishes given goals., including collecting, analys- ing, evaluating and present- ing data.	Computer Science Piper Kits NC Link: Design, write and de- bug programs that accomplish specific goals, including con- trolling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to detect and correct errors in algo- rithms and programs.	Computer Science Piper Kits NC Link: Design, write and debug programs that accomplish specif- ic goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to detect and correct errors in algorithms and programs.

Cycle B National Curriculum Links

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Online Safety	Online Safety	IT*	IT*	Computer Science	Computer Science
EYFS	Book: Webster's Manners Use technology safely and respectfully	Book: Webster's Manners Use technology safely and respectfully	Using technology around the classroom to build on children's listening skills, curiosity, crea-	classroom to build on chil- dren's listening skills, curios-	Easi-Cars Control technology and develop directional language.	Easi Cars Control technology and develop directional language.
	Know who to go to for help if something worrying hap- pens when using technology. Talking about good and bad choices in real life.	Know who to go to for help if something worrying hap- pens when using technology. Talking about good and bad choices in real life.	tivity and problem solving. Explore technology to develop a familiarity with equipment and vocabulary.	ity, creativity and problem solving. Explore technology to devel- op a familiarity with equip- ment and vocabulary.	Share equipment and be re- spectful. Develop computational thinking.	Share equipment and be respect- ful. Develop computational thinking.
	Online Safety	Online Safety	IT*	IT*	Computer Science	Computer Science
	Book: Monkey Cow	Book: Monkey Cow	iPad and Popplet	iPad and Popplet	Bee-Bot	Espresso Coding
1/2	NC Link: Use technology safely and respectfully, keeping personal infor- mation private; identify where to go to for help and support when they have	NC Link: Use technology safely and respectfully, keeping personal infor- mation private; identify where to go to for help and support when they have	NC Link: Use technology pur- posely to create, organise, store, manipulate and retrieve digital content.	NC Link: Use technology purposely to create, organ- ise, store, manipulate and retrieve digital content. Recognise common uses of IT beyond school.	NC Link: Understand what algo- rithms are; how they are imple- mented as programs on digital devices; and that programs execute by following clear in- structions.	NC Link: Implement programs on a digital device, input precise and unambiguous instructions. Create and debug simple pro- grams.
	concerns about content or contact on the internet or other online technologies.	concerns about content or contact on the internet or other online technologies.				Use logical reasoning to predict the behaviour of simple pro- grams.
	Online Safety	Online Safety	IT*	IT*	Computer Science	Computer Science
3/4	Book: Digiduck's Big Decision NC Link: Use technology safely, respectfully and responsibly; recognise ac- ceptable/unacceptable behaviour; identify a range of ways to report concerns.	Book: Digiduck's Big Decision NC Link: Use search tech- nologies effectively, appre- ciate how results are se- lected and ranked, and be discerning in evaluating digital content.	Microsoft PowerPoint NC Link: Select, use and com- bine a variety of software (including internet services) to create content that accom- plishes given goals, including collecting, analysing, evaluating and presenting information.	NC Link: Understand com- puter networks including the internet; how they can pro- vide multiple services, such as the world wide web.	Espresso Coding NC Link: Use sequence, selec- tion and repetition in pro- grams.; work with variables and various forms of input and out- put. Design, write and debug pro- grams that accomplish specific goals.	Lego Education SPIKE Essential NC Link: Design, write and debug programs that accomplish specif- ic goals, including controlling or simulating physical systems. Detect and correct errors in algorithms and programs.
	Online Safety	Online Safety	IT*	IT*	Computer Science	Computer Science
5/6	Book: Staying Safe Online NC Link: NC Link: Use tech- nology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns.	Book: Staying Safe Online	Microsoft Office NC Link: Select, use and com- bine a variety of software (including internet services) to design and create a range of programs, systems and content that accomplishes given goals, including collecting, analysing, evaluating and presenting data and information.	Microsoft Office NC Link: Select, use and combine a variety of soft- ware (including internet ser- vices) to design and create a range of programs, systems and content that accomplish- es given goals, including col- lecting, analysing, evaluating and presenting data and information.	Espresso Coding NC Link: Design, write and de- bug programs that accomplish specific goals. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to detect and correct errors in algorithms and programs.	Espresso Coding NC Link: Design, write and debug programs that accomplish specif- ic goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to detect and correct errors in algorithms and programs.

Year	Term 1 & 2	Term 3	Term 4	Term 5	Term 6
	Online Safety	IT*	IT*	Computer Science	Computer Science
EYFS	self image, identity, relationships, reputation, bullying, information, health, wellbeing, lifestyle, privacy, security, safe, trust, kind, careful, technology, online, device, choice, tell.		tablet, iPad, computer, internet, phone, keyboard, mouse, interactive, interactive whiteboard, photograph, camera, technology, information, communicate.	share, respectful, direction, technology, control, commands, code, steps, program, run.	share, respectful, direction, technology, control, commands, code, steps, program, run.
	Online Safety	IT*	IT*	Computer Science	Computer Science
1/2	self image, identity, relationships, reputation, bullying, information, health, wellbeing, lifestyle, privacy, security, age appropriate, website, on line safety, responsible, tell, trust, internet, adult, communicate, digital technology, search engine, password.	edit, create, launch, application, text, image, software, rearrange, delete, undo, redo, clips, window, minimise, re- store, screen, click, close, move, size, present, tools, clip trimming, clip split- ting, storyboard, movie-making process, photos library, import, font, colour, cut, Apple, iPad, iOS.	edit, create, launch, application, text, image, software, rearrange, delete, undo, redo, clips, window, minimise, restore, screen, click, close, move, size, present, tools, clip trimming, clip splitting, storyboard, movie-making process, photos library, import, font, colour, cut, Apple, iPad, iOS.	Command, sequence, algorithm, program, run, steps, direction, control, code.	Year 1: code, instruction, run, up, down, left, right, direction, object, action, click, programming, algorithm, instruction, order, sequence, repeat, program, action, start event, click event, start, stop, algorithm. Year 2: object, key, press, control, algo- rithm, input device, action, key press event, run, execute, direction, code, clockwise, anti-clockwise, pointer, pointer press, pointer release, mouse, device, program, button, debug.
,	Online Safety	IT*	IT*	Computer Science	Computer Science
3/4	self image, identity, relationships, reputation, bullying, information, health, wellbeing, lifestyle, privacy, security, positive comments, choice, communicate, message, social media, gaming, avatar, email, password, cyberbullying, account, private, trust, tell, search, personal, cyber- bullying, belief, opinion, fact, auto-	draw, object, shape, line, line colour, fill, colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, minimise, re- store, size, move, split, create, organ- ise, file, folder, close, save, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar,	server, network switch, wireless rout- er, wireless devices, printer, wireless internet connection, wired internet connection, clients, workstations, local area network (LAN)	<u>Year 3</u> : sequence, run, execute, algorithm, debug, timer, event, timer event, com- mand, variable, instruction, repeat, pro- gram, condition, hit event, direction, input, debug, correct, error, collide, conditional statement, bug. <u>Year 4</u> : variable, score, start, click, time, alert,	code, build, interactive, solution, modify, evaluate, troubleshoot, problem solve, de- bug, bug, error, instructions, computa- tional thinking, test, loop, engineering design process, prototype, create, se- quence, collaborate, discuss, talk, investi- gate, hardware, solution, explore, pro- gram,
	complete, age restrictions, peer pressure, connected devices, inter- net.	spellcheck, word processing software (Word), productivity tools, retrieve, review, evaluate.		conditional event, value, hit event, nega- tive, collide, change, cost, total, button, set, event, condition, debug, repetition, loop, action, efficient, nesting, repeat, if statement, always, direction, bug.	(This is not an exclusive list of vocab for the Lego Education Spike Essential kits.)
	Online Safety	IT* (Year 5)	IT* (Year 5)	Computer Science	Computer Science
5/6	self image, identity, relationships, reputation, bullying, information, health, wellbeing, lifestyle, privacy, security, copyright, ownership, word wide web, communicate, message, social media, cyberbullying, plagia- rism, account, private, public, age appropriate, website, internet, copied, modified, altered, context,	Review vocab from Years 1-4 window, layout, text, font, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide, edit, software, productivity tools, hyperlink, internet, snipping tool, applications, data, import- ing, present, collect, analyse.	window, layout, text, font, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide, edit, software, productivity tools, hyper- link, internet, snipping tool, applica- tions, data, importing, present, col- lect, analyse. IT* (Year 6)	Review previous Computer Science vocab. Piper Kit, assemble, build, blueprint, col- laborate, talk, discuss, evaluate, debug, execute, pin, solve, error, troubleshooting, bug, computational thinking, decompose, iterate, sequential, instructions, compo- nent, code, algorithm, engineering, electric currents, conductivity, circuit, signal, state.	Piper Kit, assemble, build, blueprint, col- laborate, talk, discuss, evaluate, debug, solve, error, troubleshooting, bug, compu- tational thinking, decompose, iterate, sequential, instructions, component, code, algorithm, engineering, electric currents, conductivity, circuit, signal, state.
	online community, tell, trust, adult, summarise, information, judgement, choice, report, concern, risk, bal- anced, apps, games, content, pay- ment, positive, negative, permis- sions, share, acceptable.	IT* (Year 6) Review Vocab Years 1-5	Review Vocab Years 1-5	(This is not an exclusive list of vocab for the Piper Kit scheme of learning.)	(This is not an exclusive list of vocab for the Piper Kit scheme of learning.)

Cycle A - Key Vocabulary

Cycle B - Key Vocabulary

Year	Term 1 & 2	Term 3	Term 4	Term 5	Term 6
	Online Safety	IT*	IT*	Computer Science	Computer Science
YFS	self image, identity, relationships, reputation, bullying, information, health, wellbeing, life- style, privacy, security, safe, trust, kind, care- ful, technology, online, device, choice, tell.	tablet, iPad, computer, internet, phone, keyboard, mouse, interac- tive, interactive whiteboard, photograph, camera, technology, information, communicate.	tablet, iPad, computer, internet, phone, keyboard, mouse, interactive, interactive whiteboard, photograph, camera, technology, information, com- municate.	share, respectful, direction, technology, control, commands, code, steps, program, run.	share, respectful, direction, technolo- gy, control, commands, code, steps, program, run.
	Online Safety	IT*	IT*	Computer Science	Computer Science
/2	self image, identity, relationships, reputation, bullying, information, health, wellbeing, life- style, privacy, security, age appropriate, web- site, on line safety, responsible, tell, trust, internet, adult, communicate, digital technology, search engine, password, permission, peer pres- sure, risk, email, online gaming, consent, key- words, navigate, imaginary, true, real, voice activation, account, device.	Popplet, create, colour-code, drag, drop, reorganise, reshape, resize, image, video, text, draw, capture, organise, collaborate, sort, software, present, infor- mation, retrieve, internet, appli- cation, min map, ideas, share, font, size, colour, restore, undo, redo.	Popplet, create, colour-code, drag, drop, reorganise, reshape, resize, image, video, text, draw, capture, organise, collaborate, sort, software, present, information, retrieve, inter- net, application, min map, ideas, share, font, size, colour, restore, undo, redo.	Command, sequence, algorithm, program, run, steps, direction, control, code.	Year 1: code, instruction, run, up, down, left, right, direction, object, action, click, programming, algorithm, instruction, order, sequence, repeat, program, action, start event, click event, start, stop, algorithm, bug. Year 2: object, key, press, control, algorithm, input device, action, key press event, run, execute, direction, code, clockwise, anti-clockwise, point er, pointer press, pointer release, mouse, device, program, button, de- bug, bug.
	Online Safety	IT*	IT*	Computer Science	Computer Science
3/4	self image, identity, relationships, reputation, bullying, information, health, wellbeing, life- style, privacy, security, positive comments, choice, communicate, message, social media, gaming, avatar, email, password, cyberbullying, account, private, trust, tell, search, personal, cyberbullying, belief, opinion, fact, autocom- plete, age restrictions, peer pressure, connected devices, internet, perception, livestreaming, create, copy, share, image, video, text, chat, advertising, in-app purchases, pop-ups, opinion, belief, sharing, positive, negative, strategy, consent.	draw, object, shape, line, line colour, fill, colour, group, un- group, font, size, text box, for- mat, image, wrap text, plan, link, image, object, minimise, restore, size, move, split, create, organ- ise, file, folder, close, save, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spell- check, presentation program (PowerPoint), productivity tools, retrieve, review, evaluate.	filter, Google, Microsoft Edge, Safari, World Wide Web, internet, search engine, image, keyboard, email, sub- ject, address, communicate, sender, safe, secure, social media, server, network switch, wireless router, wire- less devices, printer, wireless internet connection, wired internet connection, clients, workstations, local area net- work (LAN).	Year 3: sequence, run, execute, algo- rithm, debug, timer, event, timer event, command, variable, instruction, repeat, program, condition, hit event, direction, input, debug, correct, error, collide, conditional statement, bug. Year 4: variable, score, start, click, time, alert, conditional event, value, hit event, nega- tive, collide, change, cost, total, button, set, event, condition, debug, repetition, loop, action, efficient, nesting, repeat, if statement, always, direction, bug.	code, build, interactive, solution, modify, evaluate, troubleshoot, prob- lem solve, de-bug, bug, error, in- structions, computational thinking, test, loop, engineering design process, prototype, create, sequence, collabo- rate, discuss, talk, investigate, hard- ware, solution, explore, program, (This is not an exclusive list of vocab for the <i>Lego Education Spike Essentia</i> kits.)
	Online Safety	IT* (Year 5)	IT* (Year5)	Computer Science	Computer Science
5/6	self image, identity, relationships, reputation, bully- ing, information, health, wellbeing, lifestyle, priva- cy, security, copyright, ownership, word wide web, communicate, message, social media, cyberbullying, plagiarism, account, private, public, age appropriate, website, internet, copied, modified, altered, con- text, online community, tell, trust, adult, summa- rise, information, judgement, choice, report, con- cern, risk, balanced, apps, games, content, pay- ment, positive, negative, permissions, share, ac- ceptable, references, source, software, data, set- tings, auto updates, secure, store, illegal, impact, strategy. PEGI, BBFC, [arental warnings, opinion, fact, screen-grab, URL, profile, anonymity, digital personality, consequences, challenge, reject, inap-	Review vocab from Years 1-4 window, layout, text, font, for- mat, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, meas- urement, guide, edit, software, productivity tools, hyperlink, internet, snipping tool, applica- tions, data, importing, present, collect, analyse. IT* (Year 6) Review Vocab Years 1-5	window, layout, text, font, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, di- mension, measurement, guide, edit, software, productivity tools, hyperlink, internet, snipping tool, applications, data, importing, present, collect, ana- lyse. IT* (Year 6) Review Vocab Years 1-5	Review Vocab Years 1-4 <u>Level 5</u> : delay, output, variable, object, action, speed, acceleration, decelerate, debug, angle, speed, simulation, heading, coordinate, negative numbers, decomposi- tion, y-axis, x-axis, position, conditional event, friction, overlap, if statement, generate, random, degrees, condition, position, value, random number, range, heading, hit, input, output, debug, bug.	Level 6: input, variable, property, background, grid, pixel, block, con- vert, value, alignment, unit, scale, condition, event, random, loop, if statement, discount, calculate, total, percentage, Boolean, analogue, digital, numbers, property, parameter, ob- jects, location, friction, direction, angle, heading, x-coordinate, y- coordinate, speed, simulation, decom- position, debug, bug.