

SUBJECT: Computing	Autumn 1 Objectives	Autumn Experiences	Spring Experiences	Summer Experiences
Reception	<ul style="list-style-type: none"> • Can play in a group, extending and elaborating play ideas, e.g. building up a role-play activity with other children. • Initiates play, offering cues to peers to join them. • Can select and use activities and resources with help. • Enjoys responsibility of carrying out small tasks. 	Role play - ICT lessons - draw self, add mouths to faces to show emotions. Taking turns to use IAW, Ipads, laptops. Select program to play independently. Display - use ipads to take picture of self and new friend.	Role play - keyboards, pretend laptops Taking turns to use IAW, Ipads, laptops. Select program to play independently.	Role play - torches in bat cave Taking turns to use IAW, Ipads, laptops. Select program to play independently.
	<ul style="list-style-type: none"> • Listens to stories with increasing attention and recall. • Understands use of equipment (e.g. ipads to record photograph, sound, video) • Is able to follow directions • Shows understanding of prepositions such as 'under', 'on top', 'behind' by carrying out an action or selecting correct picture. 	Listening area - cd stories, songs - chn independently work buttons & change cds. Watch, listen and read ebooks on IAW, ipads, laptops. Bee bots. Ipads to record voice/video another child explaining something.	Listening area - cd stories, songs - chn independently work buttons & change cds. Watch, listen and read ebooks on IAW, ipads, laptops. Bee bots. Ipads to record voice/video another child explaining something. Easy mobile phones - chn communicate with each other outside.	Listening area - cd stories, songs - chn independently work buttons & change cds. Watch, listen and read ebooks on IAW, ipads, laptops. Bee bots. Ipads to record voice/video another child explaining something. Easy mobile phones - chn communicate with each other outside.
	<ul style="list-style-type: none"> • Understands that equipment and tools have to be used safely. • Shows a preference for a dominant hand. • Uses one-handed tools and equipment, 	Using technical equipment respectfully - ipads, laptops, pc, cd player, bee bots. Develop mouse control when using pc, finger control when using ipad & laptops.	Using technical equipment respectfully - ipads, laptops, pc, cd player, bee bots. Develop mouse control when using pc, finger control when using ipad & laptops. HSC - internet safety lessons	Using technical equipment respectfully - ipads, laptops, pc, cd player, bee bots. Develop mouse control when using pc, finger control when using ipad & laptops. HSC - internet safety lessons
	<ul style="list-style-type: none"> • Listens to and joins in with stories and poems, one-to-one and also in small groups. • Shows interest in illustrations and print in books and print in the environment. • Recognises familiar words 	Watch, listen & read ebooks on IAW, ipads, laptops. Variety of phonics programs on IAW, ipads. Use google search engine to find answers to our questions. Navigate and read given web pages to find	Watch, listen & read ebooks on IAW, ipads, laptops. Variety of phonics programs on IAW, ipads. Use google search engine to find answers to our questions. Navigate and read given web pages to	Watch, listen & read ebooks on IAW, ipads, laptops. Variety of phonics programs on IAW, ipads. Use google search engine to find answers to our questions. Navigate and read given web pages to find information.

	<p>and signs such as own name and advertising logos.</p> <ul style="list-style-type: none"> • Knows information can be relayed in the form of print. 	<p>information.</p> <p>2simple drawing program - self portrait, independent drawing.</p> <p>2 simple Typing skills for writing.</p>	<p>find information.</p> <p>2simple 2publish - draw pictures and type sentences. EXC - make simple books.</p> <p>2 simple Typing skills for writing.</p>	<p>2simple 2publish - draw pictures and type sentences. EXC - make simple books.</p> <p>2 simple Typing skills for writing.</p>
	<ul style="list-style-type: none"> • Uses some number names and number language spontaneously. • Knows that numbers identify how many objects are in a set. • Shows an interest in numerals in the environment. • Shows interest in shapes in the environment. • Sometimes matches numeral and quantity correctly. • Recognise some numerals of personal significance. • Recognises numerals 1 to 5. 	<p>Number/shape hunt using ipads to take pictures of numbers/shapes they find.</p> <p>Use bee bot on number line.</p> <p>Experiment with calculators.</p> <p>Use stop watches to measure time.</p> <p>Use weighing scales in cooking.</p> <p>Maths programs on ipads, pc - maths base, bingo.</p>	<p>Number/shape hunt using ipads to take pictures of numbers/shapes they find.</p> <p>Use bee bot on number line.</p> <p>Experiment with calculators.</p> <p>Use stop watches to measure time.</p> <p>Use weighing scales in cooking.</p> <p>Maths programs on ipads, pc - maths base, bingo.</p>	<p>Number/shape hunt using ipads to take pictures of numbers/shapes they find.</p> <p>Use bee bot on number line.</p> <p>Experiment with calculators.</p> <p>Use stop watches to measure time.</p> <p>Use weighing scales in cooking.</p> <p>Maths programs on ipads, pc - maths base, bingo.</p>
	<ul style="list-style-type: none"> • Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. • Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. • Knows that information can be retrieved from computers. 	<p>Classroom - ipad, laptop, pc, cd player, bee bot, IAW</p> <p>Cooking - whisk, juicer</p> <p>Use google search engine to find answers to our questions.</p> <p>Navigate and read given web pages to find information.</p> <p>Locate letters on keyboard.</p> <p>Continue developing mouse control.</p>	<p>Classroom - ipad, laptop, pc, cd player, bee bot, IAW</p> <p>Cooking - whisk, juicer</p> <p>Use google search engine to find answers to our questions.</p> <p>Navigate and read given web pages to find information.</p> <p>Use metal detectors</p>	<p>Classroom - ipad, laptop, pc, cd player, bee bot, IAW</p> <p>Cooking - whisk, juicer</p> <p>Use google search engine to find answers to our questions.</p> <p>Navigate and read given web pages to find information.</p> <p>Use metal detectors</p>
	<ul style="list-style-type: none"> • Developing preferences for forms of expression. • Captures experiences and responses with a range of media, • Sings a few familiar songs. 	<p>Cd players & selection of music from different countries.</p> <p>2simple music program.</p> <p>2simple 2 paint - pc, IAW.</p> <p>Ipads - camera, video, sound clips.</p>	<p>Cd players & selection of music from different countries.</p> <p>2simple music program.</p> <p>2simple 2 paint - pc, IAW.</p> <p>Ipads - camera, video, sound clips.</p>	<p>Cd players & selection of music from different countries.</p> <p>2simple music program.</p> <p>2simple 2 paint - pc, IAW.</p> <p>Ipads - camera, video, sound clips.</p>

SUBJECT: Computing	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Labelling and Typing <u>Content:</u> Shows some familiarity with keyboard, unsure of letter location. Recognises key buttons with prompts. <u>Skills:</u> Demonstrate basic familiarity with keyboard (space bar, return, backspace, delete.) Enter text using keyboard. Correct and edit errors. Assemble text using a word bank. Demonstrate familiarity with keyboard (confident key recognition.) Using different fingers for different letters. Extended familiarity with Word operations.		Computer Art <u>Content:</u> Demonstrate some ability to control mouse smoothly. Use technology to purposefully create organise, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. <u>Skills:</u> Use mouse to select and move drawing tools. Use programme to create a picture. Create a picture using shape, line, pen and pencil tools. Developed mouse control – include some finer detail in pictures. Create a picture using a variety of tools.: Basic mouse control to create a picture. Begin to use picture processing tools (with guidance.) Create a picture using processing software. Show competent mouse control. Create pictures based on specific criteria (e.g. recreating an artist’s work. Some details in pictures drawn (evidence of fine mouse control.) Begin copy			
Key Vocabulary	Software, undo, eraser, paint, right click.		Graph, pictogram, picture, conclusion, data.		Copy, paste, label, type, keyboard, space bar, return, enter, backspace, delete.	
Year 2	Writing Stories <u>Content:</u> Use technology to purposefully create organise, manipulate and retrieve digital content. <u>Skills:</u> Begin to use word processor to create sentences. Unfamiliar with typing. Use word processor to create sentences that communicate meaning. Use space bar, shift key, return/enter and line breaks. Edit text using insert, delete and backspace. Change font, size and colour of text. Publish a written story. Begin showing typing with correct fingers. Start showing some speed with typing (start of touch typing skills.) Change font for effect. Insert paragraphs using the enter key.		Data Handling <u>Content:</u> Use technology to purposefully create organise, manipulate and retrieve digital content. <u>Skills:</u> Enter data in to graph following clear instructions. Begin to answer simple questions about data. Enter data in to graphing application. Create graph and make simple comparisons. Answer simple questions about data. Create a pictogram. Draw conclusions from graphs. Create a pictogram 1 picture = 2 people. Ask questions about data.		Logo Turtles <u>Content:</u> Understand what algorithms are Understand how they are implemented as programs Understand that they follow precise language <u>Skills:</u> Use forward/back/right/left commands Use pen up/down tool. Create shapes using logo turtle Copy and paste commands Create repeating patterns using copy and paste. Use degrees to create regular shapes. Experiment creating mazes using pen up/down tool.	
Key Vocabulary	cut, paste, fill, edit, fine mouse control, text curser, return, enter, shift, backspace.		Insert, delete, backspace, space, enter, font, full stops, text, touch typing.		Algorithms, programs, degrees, forward, right, lift, 45 90 180 360 degrees.	

<p>Year 3</p>	<p>Texts and Graphics</p> <p><u>Content</u> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p><u>Skills</u> Resize, move and combine text and graphics. Use effects, alter font size, type colour. Review, edit and amend text. Use shift key. Insert graphics from clipart. Communicate meaning by combining texts and graphics. Amend text for effect. Adjust text alignment. Change backgrounds, borders, wordArt, text boxes. Begin to show fluent typing skills.</p>	<p>Scratch</p> <p><u>Content</u> Design, write and debug programs that accomplish specific goals, Solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p><u>Skills</u> Create moving characters using drop box code. Use repeat/forever loops. Broadcast basic messages. Create sprites that interact with background and other sprites. Add a simple variable. Show confidence in creating variables Create a basic game that has interaction between sprite and user.</p>	<p>PowerPoint</p> <p><u>Content</u> Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p><u>Skills</u> Create PowerPoint presentation on different slides. Copy and paste pictures in to PowerPoint. Insert, move and edit text boxes on slides. Insert, move and edit pictures from the internet. Add animation to text boxes and pictures. Change orientation of text/text boxes. Add sound effects. Create PowerPoint for different audiences. Add timings to animations and slides. Create PowerPoint to move between slides with timing function not click function.</p>
<p>Key Vocabulary</p>	<p>Edit, past from the internet, text box, fill, gradient, format, line, dash style, width.</p>	<p>Loop, variable, block, code, Boolean, sprite, background, move, follow.</p>	<p>Orientation, format, fill, slideshow, timing, custom,</p>
<p>Year 4</p>	<p>Data Handling</p> <p><u>Content</u> Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.</p> <p><u>Skills</u> Create pictograms, bar charts and line graphs on Excel. Collect and input data in to a database. Present results and draw conclusions from them.</p> <p>Evaluate and choose the most effective graph for different results. Amend axis of graphs for better presentation. Draw detailed conclusions from graphs.</p>	<p>Advanced Scratch</p> <p><u>Content</u> Design, write and debug programs that accomplish specific goals, Solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p><u>Skills</u> Use repeat/forever loops. Broadcast messages that interact with other sprites. Create sprites that interact with background and other sprites. Add multiple variables. Create a game that allows user interaction. Show confidence in creating variables Create a detailed game that has interaction between sprite and user.</p>	<p>Animation</p> <p><u>Content</u> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p><u>Skills</u> Create a basic moving animation. Create a constant backdrop for an animation on the computer and physically. Create a storyboard of an animation. Create a stop motion animation of at least 50 frames.</p> <p>Create a consistent background on the computer using the internet to get images/media. Create a stop motion animation with a character interacting with the background. Take note of effective lighting/camera angles.</p>

<p>Key Vocabulary</p>	<p>Data, pictogram, represent, pie chart, axis, graph, line, bar, analyse, conclusion.</p>	<p>Algorithm, program, variables, interaction, loop, broadcast.</p>	<p>Stop motion, background, frame, storyboard, consistent, motion.</p>
<p>Year 5</p>	<p>Publisher</p> <p><u>Content</u> Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</p> <p><u>Skills</u> Can create basic publications Can identify the components of publisher's interface Can format text, paragraphs and apply schemes Can open and edit created documents Can create a publication for a specific audience Can apply publishing skills across the curriculum</p>	<p>Html Coding</p> <p><u>Content</u> Design, write and debug programs that accomplish specific goals, Solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p><u>Skills</u> Identify key code of html language. Create a basic html code. Create a website using <DOCTYPE> Change the font colour on html. Copy and paste code for images in to documents. Create an ordered/unordered list. Add borders to pictures Add a table to html code</p>	<p>Graphic Modelling / Sketch Up</p> <p><u>Content</u> Use objects base drawing package to manipulate shapes of objects. Create, explore and amend a 3D graphical model identifying pattern and relationships. Understand the limitations/possibilities of a modelling application.</p> <p><u>Skills</u> Provide explanations of decisions made in the construction of their work. Organise their work to create something that would appeal to a target audience. Create different views of the same object</p>
<p>Key Vocabulary</p>	<p>Format, publication, publish, edit, gradient, text box,</p>	<p>Doctype, tag, edit, format, font, style, color.</p>	<p>3d, graphic model, upscale, downscale, template, feet, inches, meter, product, design.</p>
<p>Year 6</p>	<p>Spreadsheets</p> <p><u>Content</u> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Design, write and debug programs that accomplish specific goals.</p> <p><u>Skills</u> Use basic formula functions (= + * / -) Use spreadsheet to explore a mathematical model. Explore the effects of changing data in a spreadsheet. Create graphs from spreadsheet data Change data, variables and formulae in a spreadsheet. Answer 'what if' questions and check results.</p>	<p>Python Idle</p> <p><u>Content</u> Design, write and debug programs that accomplish specific goals, Solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p><u>Skills</u> Use an idle shell to create a basic print programme. Use basic programming language. Use Idle to create equations. Set values of letters to integers. Use Turtle to create a simple shape. Create a repeating pattern Use shortcuts to type code Create a repeating pattern that alters minimally each repetition.</p>	<p>CROSS CURRICULAR</p> <p><u>Content:</u> Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p><u>Skills</u> Search a given website for information. Use a simple search engine. Find information on a given topic. Use keywords to search. Recall and use information. Refine keywords to search more closely/widely. Evaluate and show awareness of website credibility. Use this awareness to direct searches Use a search engine confidently (including back/forward buttons.)</p>

Key Vocabulary	Formula, function, data, spreadsheet, cell, graph, variable, algorithm.	Shell, print, algorithm, pattern, repeat, value, integer.	Website, search engine, reliability, evaluating, keywords.