End Points

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**IT** **Digital literacy (DL)** **Communication/ Emails**	**Digital Literacy (DL)**	**Computer science (CS)** **Algorithms** **IT**	**Computer science (CS)** **Programming**	**Computer science (CS)**	**IT**
Lessons	**Cyber walk** **3 lessons** IT Creating a digital image	**Smartie the penguin** **2 lessons** DL Knowing to ask for help	**Giving instructions…Making toast** **2 Lessons** CS Programming devices	**Journeys - Beebot Garden walk** **4 lessons** CS Programming devices	**What is an algorithm?** **3 lessons** CS Algorithms	**Aliens in Space** **5 lessons** IT Animation
End points - Expected	Most children will be able to draw lines and fill in the area created with colour to create a picture that they are happy with. They will know about the 'Undo', 'Print' and 'Save' functions. They will experiment with the animated painting tool and show good 'mouse control'.	Most children will be able to recognise that you can run into problems online and know that it is always best to seek help from a trusted adult.	Most children will understand the value of clear, step by step instructions and give examples, and know when prompted, that this can also be called an algorithm. They will understand that if a 'step' is missing or incorrect the instructions will not be successful / they will not have the desired outcome. They will also be able to name some everyday digital devices that need a clear sequence of instructions to work.	Most children will be able to use trial and error to program a set of instructions so the floor robot makes a simple route and stops at a desired point. They will be familiar with the terms algorithm, program and debug. They will also be able to use an on-screen environment to give a route.	Most children will understand the value of clear, step by step instructions and give examples, and know, when prompted, that this can also be called an algorithm. They will understand that if a 'step' is missing or incorrect the instructions will not be successful / they will not have the desired outcome. They will be able to demonstrate trial and error to rectify mistakes. They will understand that their	Most children will create a short animation using a template using the software, adding backgrounds, animation to objects and text.

					instructions control the movement of an on-screen character.	
Lessons	**Sharing my Iceberg work?** **2 lessons** DL Blogging	**How does your garden grow?** 2 **lessons** DL Safe searching	**Design a plate** **3 lessons** IT Creating an image		**I can code** **4 lessons** CS Coding using blocks	**I can sort objects** **4 lessons** IT Data handling
End points - Expected	Most children will be able to create and blog an image and text with just a little help. They will also be able to retrieve their work to add to or amend it, again with just a little help. They will know that a blog is a way to share work online.	Most children will be able to navigate the site effectively to be able to find the activity, engage with it and explain how they are playing it and what they have discovered	Most children will be able to navigate the online activities independently and be selective in their choices, correcting mistakes. They will be able to input their own meaningful text. They will create a simple design, be independent in selecting their own colours and add a simple text label.		Most children will create a set of instructions to create a playable route with their own commands. They will understand the instructions (algorithm) needs to be exact to achieve the desired outcomes.	Most children will be able to talk about some of the attributes of the objects to be sorted, sort objects into groups off and on-screen, and graph the information with little help. They will identify what the simple graphs show.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 2	**Digital literacy** **Communication/E mails** **IT**	**Digital Literacy**	**Computer science** **Algorithms**	**Computer science** **Programming**	**IT**	**IT**
Lessons	**Do you like my blog? 2 lessons** IT Creating text	**Digiducks dilemma** **2 lessons** DL Making mistakes online	**How does that work?** **2 lessons** CS Programming devices	**I can debug** **5 lessons** CS Coding using simple commands	**Minibeasties** **4 lessons** IT Sorting and classifying	**Say no to graffiti** **3 lessons** IT Creating poster inserting a photo/image
End points – Expected	Children will be able to create a text and image resource and blog them. They will be able to comment on the post of others, understanding the need to think about comments and images that they post. They will be able to respond appropriately to the comments / teacher question.	Most children will understand Digi Duck's issue, and understand the solution is to tell a trusted adult. They will be able to import images independently into the chosen programme and create their own message sentence(s) that communicates appropriate meaning.	Most children will be able to understand the value of clear, step by step instructions and sequence them. They will be able to give an example, such as a recipe, and know that this can be called an algorithm. They will be able to create instructions to perform a task. They will be able to name everyday digital devices and explain that you need to follow instructions to use them.	Most children will be able to use on screen software to write commands and create a simple program within a structured environment. They will be able to debug simple errors independently. They will understand that the commands need to be clear and in the correct order. They will know some key vocabulary such as algorithm, debug, program etc.	Most children will be able to sort / categorise some (mini-beast) data into sets, several ways. They will be able to ask yes/no questions and will be able to navigate a simple branching database. They will be able to read some simple information and use it to enter into a prepared data file, with limited help. They will be able to sort some data and find answers to some very straight-forward questions, such as counting the number	Most children will be able to add ideas to their imported photograph, with very little help. They will make some changes to their image. They will be able to insert their image and add some simple text independently, to make a poster on the topic. They will know the term copyright.

					of items in each sort category. They will be able to construct a simple branching database with limited help.	
Lessons	**Let's send a message 2 lessons** Emailing/ messaging	**Find out about….. (safe searching) 2 lessons** DL Finding information on websites	**Demolition robot 5 lessons** CS Algorithms			**How do you get to school safely? 3 lessons** IT Create graphs & answer questions
End points – Expected	Most children will also know when it is safe to respond to a message and that sometimes you must ignore messages if they are inappropriate. They will know that some information is private and should not be shared.	Most children will be able to navigate given sites and find relevant information. They will know the internet is used to find information (not just play games). They will know that their teacher selects 'safe' and appropriate websites for them to use and that some websites are not suitable. They will know to tell a trusted adult if they find something online they don't like or is upsetting.	Most children will be able to program a floor robot to move forward, back and make quarter turns to reach a goal, with reasonable accuracy. They will also be able to debug simple errors. They will be able to record some instructions which can be followed. They know terminology such as program, debug. Through trial and error they demonstrate logic and prediction to instruct an off-screen robot / on screen 'sprite'.			Most children will be able to generate some graphs using the simple tools provided and correctly answer straight-forward questions about what the graphs show, when asked. They will recognise that the online survey (vote tool) is a good way of collecting information from a group (and sharing). They will understand and use mathematical vocabulary where relevant. *They will recognise some major landmarks on a local*

						map, with help. *They will be able to say which and why some places are safer places to cross busy roads.*

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	**Digital literacy** **IT**	**Digital Literacy**	**Computer science** **Algorithms**	**Computer science** **Programming**	**IT**	**IT**
Lessons	**Do you like my presentation? 4 lessons** IT and DL Creating a presentation and Blogging	**Would I lie to you? 2 lessons** DL Safe searching/checking facts	**Can your robot make shapes?** **4 lessons** CS Coding algorithms using beebots	**I can use block coding** **5 lessons** Time-based sequencing CS Programming simple sequences in scratch	**Creating a tessellation** **2 lessons** IT Developing and creating a repeated digital pattern	**Finding out about me** **5 lessons** IT Databases
End points - Expected	Most children will be able to create a presentation with text and images with minimal help. They may add a linked page(s) with help. They will be able to blog their work. They will be able to save and retrieve their work to make changes. They will be able to comment on the posts of others, understanding the need to think about comments that they post on others' sites.	Most children will be able to identify the difference between fact, fiction and opinion in examples provided and be able to create some examples of their own. They will know they should select websites to use with care.	Beebots - Most children will be able to program a floor robot to create some shapes based on squares and rectangles correctly, using trial and error. They will be able to record some instructions, in an appropriate written form. They will be able to transfer distance and directional instructions to an on-screen example. They will know the meaning of associated vocabulary such as program, algorithms.	Most children will use blocks of commands to move a sprite around the screen and identify and debug mistakes independently. They will add speech. *If blogging: they understand what blogging means.*	Most children will select images and explain which works best for the task. They will also be able to create and edit their tessellated pattern, combining elements and manipulating it and saving it successfully. They will understand what tessellation means. They will know the term copyright.	Most children will input their own data onto a prepared record card and navigate their way using the main software icons. They will find the answers to some straight-forward questions with little help, by grouping, searching and graphing data. They will be able to correctly identify some personal information that they should keep private and not put online. They will know they

						have helped to create a database file.
Lessons	**Exploring how things work** **(**WAS How does that work?) **2 lessons** CS Real world devices	**Safe searching with Dongle** **4 lessons** DL Sharing information and passwords			**See and hear my mix** **3 lessons** IT Animation using Moviemaker	
End points - Expected	Most children will be able to name several everyday digital devices and know that they need clear instructions to work. They will understand the value of clear, step by step instructions and give examples. They will understand that if a 'step' is missing or incorrect the instructions will not be successful / they will not have the	Most children will be able to explain the SMART rules and give examples of them in terms of online behaviour. They will understand the need not to share passwords and know what makes a more secure password. They will know to go to a trusted adult for advice. *They will be able to plan and create a*			Most children will be able to use software to select and add / import photos (or videos), captions, music and sounds into a 'movie' composition with little help. They will make some simple changes / edits to their work. Their outcome will have some sense	

	desired outcome and be able to include 'if' terminology in their instructions. They will be able to detect errors.	*simple 'poster', with little help.*			of purpose / audience.	

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 4	**Digital literacy** **IT**	**IT** **Digital literacy**	**Computer science** **Algorithms**	**Computer science** **Programming**	**IT**	**IT**
Lessons	**Let's email** **2 lessons** uso DL Emailing (sending and receiving) Making decisions on what to do with emails	**Here's my presentation** **4 lessons** **IT** **Using presentation software to present ideas**	**Logo turtle mania** **6 lessons** CS Logo/algorithms	**Dancing with Scratch** **4 lessons** CS Programming pics of chn in scratch	**I can edit and record sounds** (WAS 'I can rap'!) **4 lessons** **IT** **using and editing sounds**	**What's a spreadsheet? 3 lessons** **IT** **Spreadsheets**
End points - Expected	Most children will be able to explain what a packet is and the role it plays in how emails are sent and received. They will send, receive and reply to emails.	Most children will be able to talk about some things to consider when searching Internet sites for images and information. They will know the term 'copyright'. They will be able to include some relevant images and text in their presentation. They will show some awareness of the audience for their work. They may share and comment on others' work. They will also be able to save	Most children will be able to write procedures to draw letters and shapes and will also use the repeat command. They will be able to rectify mistakes or errors, understanding the term debug.	Most children will be able to create a simple simulation using selection and repetition by programming sprites. They will be able to sequence, repeat and change some events and debug and refine their work. They will be able to explain what a piece of code script used does.	Most children will be able to choose a range of sound clips, record, edit and organise a completed audio track. They will know that sound clips are usually subject to copyright.	Most children will be able to enter some data into a spreadsheet and manipulate it in simple ways (change cell contents or make simple changes to a provided formula), in order to answer some straightforward questions. They will know some basic vocabulary and have some ideas why a spreadsheet may be used.

		their work and retrieve it to make changes.				
Lessons	**Internet search for a presentation** **4 lessons** **IT** **Finding information online**	**Play Like Share** **3 lessons** DL How to share things safely online				**Creating an alien landscape** **3 lessons** **IT** **Photo manipulation using pixlr**
End points - Expected	Most children will be able to talk about some things to consider when searching Internet sites for images and information. They will know the term 'copyright'. They will be able to include some relevant images and text in their presentation. They will show some awareness of the	Most children will also be able to identify and explain some risks in sharing publicly and explain what privacy settings are used for and how they can help. They will be able to Identify and resist pressurising and manipulative behaviour, begin to know the different tactics someone might use to manipulate				Most children will select images and be able to create and edit their image, combining effects and manipulating it and saving it successfully. They will understand the terms photoshopped and copyright and be able to identify how to search for an online image using creative commons search. They

	audience for their work.	another online and give examples of how online actions can affect others. Understands what consent is and explains the possible consequences of sharing without consent. Can identify appropriate people to turn to for help and share ideas about how technology can be used positively.				will be able to put forward some reasons why images are manipulated.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	**Digital literacy** **IT**	**Digital Literacy** **IT**	**Computer science** **Algorithms**	**Computer science** **Programming** **IT**	**IT**	**IT**
Lessons	**Can you finish my story? 2 lessons** **IT** and DL **Creating text** and Blogging	**Stop! Check!** **3 lessons** DL Website validation	**Game creation with Scratch – WAS Starting with Scratch** **4 lessons** CS Programming	**Let's design in 3D** **3 lessons** **IT** **Design in 3D using SketchUp**	**My Exciting world landmarks** **4 lessons** **IT** **Finding information online**	**Simply Delicious** **5 lessons** **IT** **Spreadsheets**
End points	Most children will be able to create and blog a story independently using j2e5. They will be able to comment on the stories of others understanding the need to consider comments made. The story endings that they post show they have read and understood the story starter.	Most children will be able to find, question and check some aspects of information online and know poor quality information leads to unreliable or inaccurate results. They know not all information on the Internet is true.	Most children will be able to create a simple game by programming sprites to respond to their environment through selection and responding to inputs. They will be able to sequence, repeat and change some events and debug and refine their work. With some help they will add a variable such as a score. They will be able to explain what a piece of script is used, does.	Most children will be able to create and edit a 3D design using a range of the tools independently.	Most children will be able to search to find some relevant information and be able to present it with an audience in mind. They will be able to create a presentation using aspects of their researched information, incorporating saved images. They will know that websites are ranked and search terms are very important to find relevant information. They will know that most internet images have copyright but that NEN images are	Most children will be able to enter some data into a spreadsheet and manipulate it in simple ways (change cell contents and use the formula for addition and subtraction). They will be able to work out what some simple formulae do. They will be able to answer straight-forward questions from the data. They will know some basic vocabulary and have some ideas why a spreadsheet may be used.

					available for educational use.	
Lessons	**What is the Internet?** **2 lessons** **CS** **Explaining the Internet/WWW**	**Design a poster** **3 lessons** **IT** and DL **Digital presentation** and esafety advice		**Logo Shapes and patterns** **5 lessons** CS Procedures & variables using J2code		
End points	Most pupils will be able to simply explain the Internet and the WWW and they will know some of the key concepts associated with data transfer using some correct language and abstracted metaphors/analogies.	Most children will design a poster showing they understand the intended audience; it will show some quality in the outcome. They have a good understanding of the SMART rules and what to do in various situations.		Most children will be able to write procedures to draw simple shapes and will also use the repeat command. They will be able to rectify their mistakes or errors, understanding the term debugging. They will be able to build a procedure and save, retrieve and develop it. With support, they will use a variable in a procedure and know what it means.		

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 6	**IT**	**Computer science**	**Digital Literacy**	**Computer science** **Algorithms** **Digital Literacy**	**IT**	**IT**
Lessons	**Do you agree?** **3 lessons** **IT** **blogging**	**Have fun with Scratch** **4 lessons** **CS** **Programming and problem solving**	**How can we trust the internet?** **3 lessons** **DL** **Website validation, Finding and evaluating**	**Logo Block of flats 4 lessons** **CS** **Logo/ Algorithms**	**What's Wrong here?** **3 lessons** **CS** **Syntax & logic errors**	**I can make a stop frame animation** **5 lessons** **IT** **Stop frame animation**
End points – Expected	Most children will be able to create a presentation that will show some quality in the outcome, making use of text, images and links. Their blog comments will be constructive and show an understanding of how to respond to a persuasive argument. They will understand some key online issues related to blogging and know how to report problems.	Most children will be able to create a simple game by designing and then programming sprites to sense and respond to their environment through selection and responding to inputs. They will be able to investigate and explain how other programs work. They will be able to investigate code and test and refine their own work. With some help they will add a variable such as a score. They will be able to explain what a piece of code does. They will be able to	Most children will find valid information using sensible keywords / search terms. They will identify some key things to check in order to validate online information and will understand that content can easily be faked. They will know some issues about posting or using fake information. They will know to seek advice if they are unsure about things they find.	Most children will be able to write simple procedures and use repeat. They will be able to rectify their mistakes or errors, understanding the term debug. They will be able to build a procedure and save, retrieve and develop it. They will use a variable in some procedures and understand what it does. They will be able to decompose a straight-forward program and explain what the parts do	Most children will be able to identify a bug, be able to explain what type of error it is and explain why this error makes a difference to the outcome. They will be able to fix simple bugs and explain why.	Most children will plan and create a stop-frame motion animation to match their intended story. They will edit their work (*adding music / sound effects where possible). They will know copyright affects the music they can use.*

		solve a problem and produce a programmed solution.				
Lessons	**Let's design and combine in 3D** **3 lessons** **IT** **3D designing**			**How fake is that** **3 lessons** **DL** **Online media and impacts**	**Party time** **4 lessons** **IT** **Spreadsheets**	
End points – Expected	Most children will be able to create, edit and improve some 3D shapes and combine two 3D shapes to create a planned design.			Can discuss the way adverts and blogs online try to persuade people. Is aware that sometimes information is fake. Is able to talk about some of the risks and issues, such as peer pressure, and knows ways to report concerns. *Can create a blog / podcast or video.*	Most children will be able to enter some data into a spreadsheet and create a simple formula, such as to calculate costs. They will be able to use the spreadsheet to model some changes to help them make decisions. They will know some basic vocabulary and have ideas why a spreadsheet may be used.	