



Stadhampton Primary School
Computing
2026-2027



Year 1 and 2	Objectives	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		Information technology all around us	Robot algorithms	Digital photography	Pictograms	Making music	Programming quizzes
		How does information technology help us in our everyday lives?	How do algorithms help us solve problems?	How can we use technology to capture and change images?	How can we collect, organise and share information using a computer?	How can we use a computer to create and change music?	How can we design, build and improve a program using repeated instructions?
		- identify examples of computers -describe some uses of computers -identify that a computer is a part of IT -identify examples of IT -sort school IT by what it's used for -identify that some IT can be used in more than one way -find examples of information technology -sort IT by where it is found -talk about uses of information technology -recognise common types of technology -demonstrate how IT devices work together -say why we use IT -list different uses of information technology -talk about different rules for using IT -say how rules can help keep me safe -identify the choices that I make when using IT -use IT for different types of activities -explain the need to use IT in different ways	-follow instructions given by someone else -choose a series of words that can be enacted as a sequence -give clear instructions -use the same instructions to create different algorithms -use an algorithm to program a sequence on a floor robot -show the difference in outcomes between two sequences that consist of the same commands -follow a sequence -predict the outcome of a sequence -compare my prediction to the program outcome -explain the choices I made for my mat design -identify different routes around my mat -test my mat to make sure that it is usable -explain what my algorithm should achieve -create an algorithm to meet my goal -use my algorithm to create a program -test and debug each part of the program -plan algorithms for different parts of a task -put together the different	-recognise what devices can be used to take photographs -talk about how to take a photograph -explain what I did to capture a digital photo -explain the process of taking a good photograph -take photos in both landscape and portrait format -explain why a photo looks better in portrait or landscape format -identify what is wrong with a photograph -discuss how to take a good photograph -improve a photograph by retaking it -explore the effect that light has on a photo -experiment with different light sources -explain why a picture may be unclear -recognise that images can be changed -use a tool to achieve a desired effect -explain my choices -apply a range of photography skills to capture a photo -recognise which photos have been changed -identify which photos are real and which have been	-record data in a tally chart -represent a tally count as a total -compare totals in a tally chart -enter data onto a computer -use a computer to view data in a different format -use pictograms to answer simple questions about objects -organise data in a tally chart -use a tally chart to create a pictogram -explain what the pictogram shows -tally objects using a common attribute -create a pictogram to arrange objects by an attribute -answer 'more than'/'less than' and 'most/least' questions about an attribute -choose a suitable attribute to compare people -collect the data I need -create a pictogram and draw conclusions from it -use a computer program to present information in different ways -share what I have found out using a computer -give simple examples of why information should not be shared	-identify simple differences in pieces of music -describe music using adjectives -say what I do and don't like about a piece of music -create a rhythm pattern -play an instrument following a rhythm pattern -explain that music is created and played by humans -connect images with sounds -use a computer to experiment with pitch -relate an idea to a piece of music -identify that music is a sequence of notes -explain how my music can be played in different ways -refine my musical pattern on a computer -create a rhythm which represents an animal I've chosen -create my animal's rhythm on a computer -add a sequence of notes to my rhythm -review my work -explain how I changed my work -listen to music and describe how it makes me feel	-identify the start of a sequence -identify that a program needs to be started -show how to run my program -predict the outcome of a sequence of commands -match two sequences with the same outcome -change the outcome of a sequence of commands -work out the actions of a sprite in an algorithm -decide which blocks to use to meet the design -build the sequences of blocks I need -choose backgrounds for the design -choose characters for the design -create a program based on the new design -choose the images for my own design -create an algorithm -build sequences of blocks to match my design -compare my project to my design -improve my project by adding features -debug my program

			parts of my program	changed			
	Vocabulary	Information technology (IT), computer, barcode, scanner/scan	instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition	device, camera, photograph, capture, image, digital, landscape, portrait, framing, subject, compose, light sources, flash, focus, background, editing, filter, format, framing, lighting,	more than, less than, most, least, common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute, group, same, different, conclusion, block diagram, sharing	music, quiet, loud, feelings, emotions, pattern, rhythm, pulse, pitch, tempo, rhythm, notes, create, emotion, beat, instrument, open, edit.	sequence, command, program, run, start, outcome, predict, blocks, design, actions, sprite, project, modify, change, algorithm, build, match, compare, debug, features, evaluate, decomposition, code
(Year 3 and 4)	Objectives	The Internet	Audio production	Photo editing	Data logging	Repetition in shapes	Repetition in games
		How does the internet help us share information safely and responsibly?	How can we use technology to create an engaging audio recording?	How can we use digital tools to change and improve images?	How can we collect and use data to answer questions about the world around us?	How can breaking problems into smaller steps help us write better programs?	How can we plan, test and improve programs that use loops and repeated actions?

		-describe the internet as a network of networks -demonstrate how information is shared across the internet -discuss why a network needs protecting -describe networked devices and how they connect -explain that the internet is used to provide many services -recognise that the World Wide Web contains websites and web pages -describe where websites are stored when uploaded to the WWW -describe how to access websites on the WWW -explain the types of media that can be shared on the WWW -explain what media can be found on websites -recognise that I can add content to the WWW -explain that internet services can be used to create content online -explain that websites and their content are created by people -suggest who owns the content on websites -explain that there are rules to protect content -explain that not everything on the World Wide Web is true -explain why some information I find online may not be honest, accurate, or legal -explain why I need to think carefully before I share or reshare content	-identify the input and output devices used to record and play sound -use a computer to record audio -explain that the person who records the sound can say who is allowed to use it -re-record my voice to improve my recording -inspect the soundwave view to know where to trim my recording -discuss what sounds can be added to a podcast -explain how sounds can be combined to make a podcast more engaging -save my project so the different parts remain editable -plan appropriate content for a podcast -record content following my plan -review the quality of my recordings -improve my voice recordings -open my project to continue working on it -arrange multiple sounds to create the effect I want -explain the difference between saving a project and exporting an audio file -listen to an audio recording to identify its strengths -suggest improvements to an audio recording -choose appropriate edits to improve my podcast	-improve an image by rotating it -explain why I might crop an image -use photo editing software to crop an image -explain that different colour effects make you think and feel different things -experiment with different colour effects -explain why I chose certain colour effects -add to the composition of an image by cloning -identify how a photo edit can be improved -remove parts of an image using cloning -experiment with tools to select and copy part of an image -use a range of tools to copy between images -explain why photos might be edited -describe the image I want to create -choose suitable images for my project -create a project that is a combination of other images -review images against a given criteria -use feedback to guide making changes -combine text and my image to complete the project	-choose a data set to answer a given question -suggest questions that can be answered using a given data set -identify data that can be gathered over time -explain what data can be collected using sensors -use data from a sensor to answer a given question -identify that data from sensors can be recorded -recognise that a data logger collects data at given points -identify the intervals used to collect data -talk about the data that I have captured -view data at different levels of detail -sort data to find information -explain that there are different ways to view data -view data at different levels of detail -sort data to find information -explain that there are different ways to view data -propose a question that can be answered using logged data -plan how to collect data using a data logger -use a data logger to collect data -interpret data that has been collected using a data logger -draw conclusions from the data that I have collected -explain the benefits of using a data logger	-program a computer by typing commands -explain the effect of changing a value of a command -create a code snippet for a given purpose -use a template to create a design for my program -write an algorithm to produce a given outcome -test my algorithm in a text-based language -identify everyday tasks that include repetition as part of a sequence, eg brushing teeth, dance moves -identify patterns in a sequence -use a count-controlled loop to produce a given outcome -identify the effect of changing the number of times a task is repeated -predict the outcome of a program containing a count-controlled loop -choose which values to change in a loop -identify 'chunks' of actions in the real world -use a procedure in a program -explain that a computer can repeatedly call a procedure -design a program that includes count-controlled loops -make use of my design to write a program -develop my program by debugging it	-list an everyday task as a set of instructions including repetition -predict the outcome of a snippet of code -modify a snippet of code to create a given outcome -modify loops to produce a given outcome -choose when to use a count-controlled and an infinite loop -recognise that some programming languages enable more than one process to be run at once -choose which action will be repeated for each object -explain what the outcome of the repeated action should be -evaluate the effectiveness of the repeated sequences used in my program -identify which parts of a loop can be changed -explain the effect of my changes -re-use existing code snippets on new sprites -evaluate the use of repetition in a project -select key parts of a given project to use in my own design -develop my own design explaining what my project will do -refine the algorithm in my design -build a program that follows my design -evaluate the steps I followed when building my project
	Vocabulary	internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web,	audio, microphone, speaker, headphones, input device, output device, sound, podcast, edit, trim, align, layer, import, record, playback, selection, load,	image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made	data, table, layout, input device, sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion.	Logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled	Scratch, programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block,

		content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts	save, export, MP3, evaluate, feedback.	up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font.		loop, value, trace, decompose, procedure.	duplicate, modify, design, algorithm, debug, refine, evaluate.
(Year 5 and 6)	Objectives	Internet communication	Webpage creation	Variables in games	Introduction to spreadsheets	3D modelling	Sensing
		How does the internet work and how can we use it to share information and work together safely?	How can we design, build and evaluate effective websites that are safe and suitable for users?	How can changing values in a program affect how a game works?	How can we use spreadsheets to organise, calculate and present data to answer questions?	How can we combine, manipulate and evaluate 3D objects to create effective designs?	How do selection and conditions help us create programs that respond to different inputs?
		-recognise that data is transferred using agreed methods -explain that internet devices have addresses -describe how computers use addresses to access websites -identify and explain the main parts of a data packet -explain that data is transferred over networks in packets -explain that all data transferred over the internet is in packets -recognise how to access shared files stored online -send information over the internet in different ways -explain that the internet allows different media to be shared -identify different ways of working together online -recognise that working together on the internet can be public or private -explain how the internet enables effective collaboration -explain the different ways in which people communicate -identify that there are a variety of ways to communicate over the internet -choose methods of communication to suit particular purposes -compare different methods of communicating on the	-explore a website -discuss the different types of media used on websites -know that websites are written in HTML -recognise the common features of a web page -suggest media to include on my page -draw a web page layout that suits my purpose -know why I should use copyright-free images -find copyright-free images -describe what is meant by the term 'fair use' -add content to my own web page -preview what my web page looks like -evaluate what my web page looks like on different devices and suggest/make edits -explain what a navigation path is -describe why navigation paths are useful -make multiple web pages and link them using hyperlinks -explain the implication of linking to content owned by others -create hyperlinks to link to other people's work -evaluate the user experience of a website	-identify examples of information that is variable -explain that the way a variable changes can be defined -identify that variables can hold numbers or letters -identify a program variable as a placeholder in memory for a single value -explain that a variable has a name and a value -recognise that the value of a variable can be changed -decide where in a program to change a variable -make use of an event in a program to set a variable -recognise that the value of a variable can be used by a program -choose the artwork for my project -create algorithms for my project -explain my design choices -create the artwork for my project -choose a name that identifies the role of a variable -test the code that I have written -identify ways that my game could be improved -use variables to extend my game -share my game with others	-collect data -suggest how to structure my data -enter data into a spreadsheet -explain what an item of data is -choose an appropriate format for a cell -apply an appropriate format to a cell -explain which data types can be used in calculations -construct a formula in a spreadsheet -identify that changing inputs changes outputs -calculate data using different operations -create a formula which includes a range of cells -apply a formula to multiple cells by duplicating it -use a spreadsheet to answer questions -explain why data should be organised -apply a formula to calculate the data I need to answer questions -produce a chart -use a chart to show the answer to questions -suggest when to use a table or chart	-add 3D shapes to a project -view 3D shapes from different perspectives -move 3D shapes relative to one another -resize an object in three dimensions -lift/lower 3D objects -recolour a 3D object -rotate objects in three dimensions -duplicate 3D objects -group 3D objects -accurately size 3D objects -show that placeholders can create holes in 3D objects -combine a number of 3D objects -analyse a 3D model -choose objects to use in a 3D model -combine objects in a design -construct a 3D model based on a design -explain how my 3D model could be improved -modify my 3D model to improve it	-apply my knowledge of programming to a new environment -test my program on an emulator -transfer my program to a controllable device -identify examples of conditions in the real world -use a variable in an if, then, else statement to select the flow of a program -determine the flow of a program using selection -use a condition to change a variable -experiment with different physical inputs -explain that checking a variable doesn't change its value -use an operand (e.g. <=>) in an if, then statement -explain the importance of the order of conditions in else, if statements -modify a program to achieve a different outcome -decide what variables to include in a project -design the algorithm for my project -design the program flow for my project -create a program based on my design -test my program against my design -use a range of approaches to find and fix bugs

		internet -decide when I should and should not share information online -explain that communication on the internet may not be private					
	Vocabulary	communication, protocol, data, address, Internet Protocol (IP), Domain Name Server (DNS), packet, header, data payload, chat, explore, slide deck, reuse, remix, collaboration, internet, public, private, oneway, two-way, one-to-one, one-to-many.	website, web page, browser, media, Hypertext Markup Language (HTML), logo, layout, header, media, purpose, copyright, fair use, home page, preview, evaluate, device, Google Sites, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implication, external link, embed.	variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, code, test, debug, improve, evaluate, share, assign, declare	data, collecting, table, structure, spreadsheet, cell, cell reference, data item, format, formula, calculation, spreadsheet, input, output, operation, range, duplicate, sigma, propose, question, data set, organised, chart, evaluate, results, sum, comparison, software, tools	TinkerCAD, 2D, 3D, shapes, select, move, perspective, view, handles, resize, lift, lower, recolour, rotate, duplicate, group, cylinder, cube, cuboid, sphere, cone, prism, pyramid, placeholder, hollow, choose, combine, construct, evaluate, modify.	Micro:bit, MakeCode, input, process, output, flashing, USB, trace, selection, condition, if then else, variable, random, sensing, accelerometer, value, compass, direction, navigation, design, task, algorithm, step counter, plan, create, code, test, debug.