Y3 Computing Skills and Progression		
	Objective (NC)	**Concepts and skills**
Y3 **Computing systems and networks**	use sequence, selection, and repetition in programs; work with variables and various forms of input and output 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 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	**Connecting computers** I can explain that digital devices accept inputs and produce outputs I can follow a process I can classify input and output devices I can describe a simple process I can design a digital device I can explain how I use digital devices for different activities I can recognise similarities between using digital devices and nondigital tools I can suggest differences between using digital devices and nondigital tools I can discuss why we need a network switch I can explain how messages are passed through multiple connections I can recognise different connections I can demonstrate how information can be passed between devices I can explain the role of a switch, server, and wireless access point in a network I can recognise that a computer network is made up of a number of devices I can identify how devices in a network are connected together I can identify networked devices around me I can identify the benefits of computer networks
Y3 **Programming**	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various	**Sequencing sounds** I can explain that objects in Scratch have attributes (linked to) I can identify the objects in a Scratch project (sprites, backdrops) I can recognise that commands in Scratch are represented as blocks I can choose a word which describes an onscreen action for my plan I can create a program following a design I can identify that each sprite is controlled by the commands I choose I can create a sequence of connected commands

	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 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	I can explain that the objects in my project will respond exactly to the code I can start a program in different ways I can combine sound commands I can explain what a sequence is I can order notes into a sequence I can build a sequence of commands I can decide the actions for each sprite in a program I can make design choices for my artwork I can identify and name the objects I will need for a project I can implement my algorithm as code I can relate a task description to a design
		Events and actions in programs I can choose which keys to use for actions and explain my choices I can explain the relationship between an event and an action I can identify a way to improve a program I can choose a character for my project I can choose a suitable size for a character in a maze I can program movement I can choose blocks to set up my program I can consider the real world when making design choices I can use a programming extension I can build more sequences of commands to make my design work I can choose suitable keys to turn on additional features I can identify additional features (from a given set of blocks) I can match a piece of code to an outcome I can modify a program using a design I can test a program against a given design I can evaluate my project I can implement my design I can make design choices and justify them

Y3 **Data and information**	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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Branching databases** I can create two groups of objects separated by one attribute I can investigate questions with yes/no answers I can make up a yes/no question about a collection of objects I can arrange objects into a tree structure I can create a group of objects within an existing group I can select an attribute to separate objects into groups I can group objects using my own yes/no questions I can select objects to arrange in a branching database I can test my branching database to see if it works I can compare two branching database structures I can create yes/no questions using given attributes I can explain that questions need to be ordered carefully to split objects into similarly sized groups I can create a physical version of a branching database I can create questions that will enable objects to be uniquely identified I can independently create questions to use in a branching database I can create a branching database that reflects my plan I can suggest real world uses for branching databases I can work with a partner to test my identification tool
Y3 **Creating media**	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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Stop-frame animation** I can create an effective flip book—style animation I can draw a sequence of pictures I can explain how an animation/flip book works I can create an effective stopframe animation I can explain why little changes are needed for each frame I can predict what an animation will look like I can break down a story into settings, characters and events I can create a storyboard I can describe an animation that is achievable on screen I can evaluate the quality of my animation I can review a sequence of frames to check my work

		I can use onion skinning to help me make small changes between frames I can evaluate another learner's animation I can explain ways to make my animation better I can improve my animation based on feedback I can add other media to my animation I can evaluate my final film I can explain why I added other media to my animation
	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	**Desktop publishing** I can explain the difference between text and images I can identify the advantages and disadvantages of using text and images I can recognise that text and images can communicate messages clearly I can change font style, size, and colours for a given purpose I can edit text I can explain that text can be changed to communicate more clearly I can create a template for a particular purpose I can define the term 'page orientation' I can recognise placeholders and say why they are important I can choose the best locations for my content I can make changes to content after I've added it I can paste text and images to create a magazine cover I can choose a suitable layout for a given purpose I can identify different layouts I can match a layout to a purpose I can compare work made on desktop publishing to work created by hand I can identify the uses of desktop publishing in the real world I can say why desktop publishing might be helpful

Y4 Computing Skills and Progression		
	Objective (NC)	**Concepts and skills**

Y4 **Computing systems and networks**	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 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**The Internet** I can demonstrate how information is shared across the internet I can describe the internet as a network of networks I can discuss why a network needs protecting I can describe networked devices and how they connect I can explain that the internet is used to provide many services I can recognise that the World Wide Web contains websites and web pages I can describe how to access websites on the WWW I can describe where websites are stored when uploaded to the WWW I can explain the types of media that can be shared on the WWW I can explain that internet services can be used to create content online I can explain what media can be found on websites I can recognise that I can add content to the WWW I can explain that there are rules to protect content I can explain that websites and their content are created by people I can suggest who owns the content on websites I can explain that not everything on the World Wide Web is true I can explain why I need to think carefully before I share or reshare content I can explain why some information I find online may not be honest, accurate, or legal
Y4 **Programming**	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various	**Repetition in shapes** I can create a code snippet for a given purpose I can explain the effect of changing a value of a command I can program a computer by typing commands I can test my algorithm in a text-based language I can use a template to create a design for my program I can write an algorithm to produce a given outcome I can identify everyday tasks that include repetition as part of a sequence, eg brushing teeth, dance moves

	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 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	I can identify patterns in a sequence I can use a count-controlled loop to produce a given outcome I can choose which values to change in a loop I can identify the effect of changing the number of times a task is repeated I can predict the outcome of a program containing a count-controlled loop I can explain that a computer can repeatedly call a procedure I can identify 'chunks' of actions in the real world I can use a procedure in a program I can design a program that includes count-controlled loops I can develop my program by debugging it I can make use of my design to write a program
		Repetition in games I can list an everyday task as a set of instructions including repetition I can modify a snippet of code to create a given outcome I can predict the outcome of a snippet of code I can choose when to use a count-controlled and an infinite loop I can modify loops to produce a given outcome I can recognise that some programming languages enable more than one process I can choose which action will be repeated for each object I can evaluate the effectiveness of the repeated sequences used in my program I can explain what the outcome of the repeated action should be I can explain the effect of my changes I can identify which parts of a loop can be changed I can reuse existing code snippets on new sprites I can develop my own design explaining what my project will do I can evaluate the use of repetition in a project I can select key parts of a given project to use in my own design I can build a program that follows my design I can evaluate the steps I followed when building my project I can refine the algorithm in my design to be run at once

Y4 **Data and information**	use sequence, selection, and repetition in programs; work with variables and various forms of input and output 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	**Data logging** I can choose a data set to answer a given question I can identify data that can be gathered over time I can suggest questions that can be answered using a given data set I can explain what data can be collected using sensors I can identify that data from sensors can be recorded I can use data from a sensor to answer a given question I can identify the intervals used to collect data I can recognise that a data logger collects data at given points I can talk about the data that I have captured I can explain that there are different ways to view data I can sort data to find information I can view data at different levels of detail I can plan how to collect data using a data logger I can propose a question that can be answered using logged data I can use a data logger to collect data I can draw conclusions from the data that I have collected I can explain the benefits of using a data logger I can interpret data that has been collected using a data logger
Y4 **Creating media**	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	**Audio Production** I can explain that the person who records the sound can say who is allowed to use it I can identify the input and output devices used to record and play sound I can use a computer to record audio I can discuss what sounds can be added to a podcast I can inspect the soundwave view to know where to trim my recording I can rerecord my voice to improve my recording I can explain how sounds can be combined to make a podcast more engaging I can plan appropriate content for a podcast I can save my project so the different parts remain editable I can improve my voice recordings I can record content following my plan

	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	I can review the quality of my recordings I can arrange multiple sounds to create the effect I want I can explain the difference between saving a project and exporting an audio file I can open my project to continue working on it I can choose appropriate edits to improve my podcast I can listen to an audio recording to identify its strengths I can suggest improvements to an audio recording
		Photo Editing I can explain why I might crop an image I can improve an image by rotating it I can use photo editing software to crop an image I can experiment with different colour effects I can explain that different colour effects make you think and feel different things I can explain why I chose certain colour effects I can add to the composition of an image by cloning I can identify how a photo edit can be improved I can remove parts of an image using cloning I can experiment with tools to select and copy part of an image I can explain why photos might be edited I can use a range of tools to copy between images I can choose suitable images for my project I can create a project that is a combination of other images I can describe the image I want to create I can combine text and my image to complete the project I can review images against a given criteria I can use feedback to guide making changes

Y5 Computing Skills and Progression		
	Objective (NC)	**Concepts and skills**

Y5 **Computing systems and networks**	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 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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Systems and searching:** I can describe that a computer system features inputs, processes, and outputs I can explain that computer systems communicate with other devices I can explain that systems are built using a number of parts I can explain the benefits of a given computer system I can identify tasks that are managed by computer systems I can identify the human elements of a computer system I can compare results from different search engines I can make use of a web search to find specific information I can refine my web search I can explain why we need tools to find things online I can recognise the role of web crawlers in creating an index I can relate a search term to the search engine's index I can explain that a search engine follows rules to rank results I can give examples of criteria used by search engines to rank results I can order a list by rank I can describe some of the ways that search results can be influenced I can explain how search engines make money I can recognise some of the limitations of search engines
Y5 **Programming**	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; 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	**Selection in physical computing** I can create a simple circuit and connect it to a microcontroller I can explain what an infinite loop does I can program a microcontroller to make an LED switch on I can connect more than one output component to a microcontroller I can design sequences that use count-controlled loops I can use a count-controlled loop to control outputs I can design a conditional loop I can explain that a condition is either true or false I can program a microcontroller to respond to an input I can explain that a condition being met can start an action I can identify a condition and an action in my project

	correct errors in algorithms and programs 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	I can use selection (an 'if…then…' statement) to direct the flow of a program I can create a detailed drawing of my project I can describe what my project will do I can identify a real-world example of a condition starting an action I can test and debug my project I can use selection to produce an intended outcome I can write an algorithm that describes what my model will do
		Selection in quizzes I can identify conditions in a program I can modify a condition in a program I can recall how conditions are used in selection I can create a program with different outcomes using selection I can identify the condition and outcomes in an 'if... then… else...' statement I can use selection in an infinite loop to check a condition I can design the flow of a program which contains 'if… then… else…' I can explain that program flow can branch according to a condition I can show that a condition can direct program flow in one of two ways I can identify the outcome of user input in an algorithm I can outline a given task I can use a design format to outline my project I can implement my algorithm to create the first section of my program I can share my program with others I can test my program I can extend my program further I can identify the setup code I need in my program I can identify ways the program could be improved
Y5 **Data and information**	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	**Flat-file databases** I can create a database using cards I can explain how information can be recorded I can order, sort, and group my data cards

	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	I can choose which field to sort data by to answer a given question I can explain what a field and a record is in a database I can navigate a flat-file database to compare different views of information I can combine grouping and sorting to answer specific questions I can explain that data can be grouped using chosen values I can group information using a database I can choose multiple criteria to answer a given question I can choose which field and value are required to answer a given question I can outline how 'AND' and 'OR' can be used to refine data selection I can explain the benefits of using a computer to create charts I can refine a chart by selecting a particular filter I can select an appropriate chart to visually compare data I can ask questions that will need more than one field to answer I can present my findings to a group I can refine a search in a real-world context
Y5 **Creating media**	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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about	**Video production** I can compare features in different videos I can explain that video is a visual media format I can identify features of videos I can experiment with different camera angles I can identify and find features on a digital video recording device I can make use of a microphone I can capture video using a range of filming techniques I can review how effective my video is I can suggest filming techniques for a given purpose I can create and save video content I can decide which filming techniques I will use I can outline the scenes of my video I can explain how to improve a video by reshooting and editing I can select the correct tools to make edits to my video I can store, retrieve, and export my recording to a computer

	content and contact.	I can evaluate my video and share my opinions I can make edits to my video and improve the final outcome I can recognise that my choices when making a video will impact on the quality of the final outcome
	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	**Introduction to vector graphics** I can discuss how vector drawings are different from paper-based drawings I can experiment with the shape and line tools I can recognise that vector drawings are made using shapes I can explain that each element added to a vector drawing is an object I can identify the shapes used to make a vector drawing I can move, resize, and rotate objects I have duplicated I can explain how alignment grids and resize handles can be used to improve consistency I can modify objects to create a new image I can use the zoom tool to help me add detail to my drawings I can change the order of layers in a vector drawing I can identify that each added object creates a new layer in the drawing I can use layering to create an image I can copy part of a drawing by duplicating several objects I can recognise when I need to group and ungroup objects I can reuse a group of objects to further develop my vector drawing I can compare vector drawings to freehand paint drawings I can create a vector drawing for a specific purpose I can reflect on the skills I have used and why I have used them

Y6 Computing Skills and Progression		
	Objective (NC)	**Concepts and skills**
Y6	design, write and debug programs that accomplish specific goals, including controlling	**Communication and collaboration** I can describe how computers use addresses to access websites I can explain that internet devices have addresses I can recognise that data is transferred using agreed methods

Computing systems and networks	or simulating physical systems; solve problems by decomposing them into smaller parts 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 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	I can explain that all data transferred over the internet is in packets I can explain that data is transferred over networks in packets I can identify and explain the main parts of a data packet I can explain that the internet allows different media to be shared I can recognise how to access shared files stored online I can send information over the internet in different ways I can explain how the internet enables effective collaboration I can identify different ways of working together online I can recognise that working together on the internet can be public or private I can choose methods of communication to suit particular purposes I can explain the different ways in which people communicate I can identify that there are a variety of ways to communicate over the internet
Y6 Programming	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; 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	**Variables in games** I can explain that the way a variable changes can be defined I can identify examples of information that is variable I can identify that variables can hold numbers or letters I can explain that a variable has a name and a value I can identify a program variable as a placeholder in memory for a single value I can recognise that the value of a variable can be changed I can decide where in a program to change a variable I can make use of an event in a program to set a variable I can recognise that the value of a variable can be used by a program I can choose the artwork for my project I can create algorithms for my project I can explain my design choices I can choose a name that identifies the role of a variable I can create the artwork for my project

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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	I can test the code that I have written I can identify ways that my game could be improved I can share my game with others I can use variables to extend my game
design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; 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 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	**Sensing movement** I can apply my knowledge of programming to a new environment I can test my program on an emulator I can transfer my program to a controllable device I can determine the flow of a program using selection I can identify examples of conditions in the real world I can use a variable in an if, then, else statement to select the flow of a program I can experiment with different physical inputs I can explain that checking a variable doesn't change its value I can use a condition to change a variable I can explain the importance of the order of conditions in else, if statements I can modify a program to achieve a different outcome I can use an operand (e.g. <>=) in an if, then statement I can decide what variables to include in a project I can design the algorithm for my project I can design the program flow for my project I can create a program based on my design I can test my program against my design I can use a range of approaches to find and fix bugs

	accomplish given goals, including collecting, analysing, evaluating and presenting data and information	
Y6 **Data and information**	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	**Introduction to spreadsheets** I can collect data I can enter data into a spreadsheet I can suggest how to structure my data I can apply an appropriate format to a cell I can choose an appropriate format for a cell I can explain what an item of data is I can construct a formula in a spreadsheet I can explain which data types can be used in calculations I can identify that changing inputs changes outputs I can apply a formula to multiple cells by duplicating it I can calculate data using different operations I can create a formula which includes a range of cells I can apply a formula to calculate the data I need to answer questions I can explain why data should be organised I can use a spreadsheet to answer questions I can produce a chart I can suggest when to use a table or chart I can use a chart to show the answer to questions
Y6 **Creating media**	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	**Webpage creation** I can discuss the different types of media used on websites I can explore a website I know that websites are written in HTML I can draw a web page layout that suits my purpose I can recognise the common features of a web page I can suggest media to include on my page I can describe what is meant by the term 'fair use'

	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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	I can find copyright free images I can say why I should use copyright free images I can add content to my own web page I can evaluate what my web page looks like on different devices and suggest/make edits I can preview what my web page looks like I can describe why navigation paths are useful I can explain what a navigation path is I can make multiple web pages and link them using hyperlinks I can create hyperlinks to link to other people's work I can evaluate the user experience of a website I can explain the implication of linking to content owned by others
	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 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**3D modelling** I can add 3D shapes to a project I can move 3D shapes relative to one another I can view 3D shapes from different perspectives I can lift/lower 3D objects I can recolour a 3D object I can resize an object in three dimensions I can duplicate 3D objects I can group 3D objects I can rotate objects in three dimensions I can accurately size 3D objects I can combine a number of 3D objects I can show that placeholders can create holes in 3D objects I can analyse a 3D model I can choose objects to use in a 3D model I can combine objects in a design I can construct a 3D model based on a design I can explain how my 3D model could be improved I can modify my 3D model to improve it

St Paul's C of E Junior School
Computing - progression and skills document

National curriculum coverage - Years 3 and 4	3.1 Connecting computers	3.2 Stop-frame animation	3.3 Sequencing sounds	3.4 Branching databases	3.5 Desktop publishing	3.6 Events and actions in programs	4.1 The internet	4.2 Audio production	4.3 Repetition in shapes	4.4 Data logging	4.5 Photo editing	4.6 Repetition in games
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; 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			✓			✓			✓			✓
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	✓						✓					
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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact		✓		✓			✓	✓			✓	

St Paul's C of E Junior School

Computing - progression and skills document

National curriculum coverage - Years 5 and 6	5.1 Systems and searching	5.2 Video production	5.3 Selection in physical computing	5.4 Flat-file databases	5.5 Introduction to vector graphics	5.6 Selection in quizzes	6.1 Communication and collaboration	6.2 Webpage creation	6.3 Variables in games	6.4 Introduction to spreadsheets	6.5 3D modelling	6.6 Sensing movement
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; 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			✓			✓			✓			✓
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	✓						✓					
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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	✓	✓						✓	✓		✓	