

## Stoke By Nayland Cof E Primary School

## KS2 Computing 4 Year Knowledge Cycle

Cycle 1					
Cycle 1	Purpose	Respect	Communication	Key Vocabulary	
Connecting Computers	You should also know that <u>Information technology</u> (I.T.) includes <u>computers</u> and <u>things that work with</u> <u>computers</u> . -You should also know that computers have Input, Process and Output (IPO) <u>components</u> . -Computer systems are built using a <u>number of parts</u> . -Computer systems can communicate with other devices. -There are many, many different kinds of computer systems all around the world, ranging from small-scale to large scale.	-Protocols are an agreed way of doing something. When we communicate, we use an agreed set of protocols (greeting, speaking, listening, etc.). -In computing, agreed protocols are the way that computers communicate with one another. -The digital information they send is called a 'pocket'	Computers and their users are not always in the same place as one another. With billions of computers around the world, computers need to send the information to the correct place. -To do this, computers use special addresses called IP addresses. They may look like this: From: 216. 58. 1. 214 Collaborating is another word for working together on something, to reach a shared goal. -The internet can be used to help people collaborate online, even when they are a long distance apart! -'Chat' functions can be used keep each other updated with new information. -Shared 'cloud' spaces and online drives can allow one or more person to have access to/ edit documents. -When building upon someone else's work, you need to be aware of copyright and intellectual property rules	Systems Input Process Output Protocol IP Address Packet Reuse Explore Collaboration	
Sensing	micro:bit as an input, process, output device which can be programmed. Learners will familiarise themselves with the device itself and the programming environment before creating their own programs. They will then flash their programs to the device.	apply my knowledge of programming to a new environment test my program on an emulator transfer my program to a controllable device	Use of Makecode micro:bit based step counter. They will begin by reviewing their plans and then create their code. Depending on their level of confidence, they will begin with a scaffolded, part complete project, or start a new project. Whilst they are creating their code, learners will test and debug their code, using the emulator and then the physical device. To successfully complete this project, learners will need to use all four programming constructs - sequence, repetition, selection and variables.	Plan Create Code Test debug	
Data Logging	consider what data can be collected and how it is collected. They will think about data being collected over time. Pupils will also think about questions that can and can't be answered using available data, and reflect on the	be familiar with different types of data that are collected over time. Understanding why and how data is collected over time will be useful background knowledge for the lesson.	You should be aware of questions that could be answered using a data logger in school. The data loggers should be used to log data over time, rather than being used to take individual readings. Pupils will think of questions that may be able to be answered using logged data, and those	Data Table Layout Data logger logged	

	importance of collecting the right data to answer questions. Later in the unit, pupils will put into practice the ideas that they have thought about in this lesson.	<ul><li>'Data' is information, usually numerical, that is collected and stored in a form suitable for processing.</li><li>A 'data set' is a collection of related information, usually linked to one subject or time frame.</li></ul>	<ul><li>questions will require filtering to ensure that they are achievable.</li><li>You should be aware of how and where data loggers can be set up</li></ul>	
Sequences	<ul> <li><u>Programming</u> is when we make and input a set of instructions for computers to follow.</li> <li><u>Logo</u> is a text-based program that we can use in order to create shapes and patterns.</li> <li>-We use <u>algorithms</u> (a set of instructions to perform a task) which we can plan, model and test, in order to create accurate and imaginative shapes and patterns.</li> </ul>	<ul> <li>Patterns: Patterns are things that repeat in a logical way. In everyday life, patterns are everywhere!</li> <li>-Patterns in Logo: Instead of typing in the code to create each individual shape, we can save time by repeating a sequence of instructions. We use the 'repeat' function.</li> <li>-Repeat: Type the command 'repeat' — this repeats commands a set number of times. The number following repeat is the number of times to repeat the code, and the code to be repeated is in square brackets, e.g. repeat 4 [FD 100 LT 90]</li> <li>The above code will repeat FD 100 LT 90 four times.</li> <li>-Creating Shapes and Loops: To make shapes, we need to know the angles of corners of different shapes (see right). Using the repeat function with shapes can help us to make spirals.</li> </ul>	<ul> <li>Microcontrollers: A microcontroller is a small device that can be programmed to control devices that are connected to it.</li> <li>One brand of widely used microcontroller is called a Crumble controller, which can be used to control many things, e.g. LEDs and motors.</li> <li>LEDs: <ul> <li>LEDs:</li> <li>LEDs are output devices that are light. When electricity is passed an LED it produces light. One type light, controlled by a Crumble controller, is called a Sparkle.</li> </ul> </li> <li>Motors: <ul> <li>Motors:</li> <li>Motors are another output device. A motor can start, stop, spin forwards, spin backwards, and go at different speeds.</li> </ul> </li> </ul>	Programming Circuit Electricity Microcontroller Code LED Algorithm Motor Sequence Debugging
Desktop Publishing	explain what 'desktop publishing' means in their own words. They will think about how desktop publishing is used in the wider world and consider the benefits of using desktop publishing applications.	identify the uses of desktop publishing in the real world say why desktop publishing might be helpful compare work made on desktop publishing to work created by hand	Benefits of desktop publishing Increased productivity and time keeping You can make more products in a shorter amount of time if you reuse templates. Reduced costs People don't have to start from scratch, so if some of the job is already done for them it saves time and the cost to the company is less. Sharing the job Jobs can be shared depending on skills, and then merged together using a desktop publishing application. Appearance of documents Desktop publishing applications have tools that can improve how documents look. Tell the learners that there may be some benefits that we haven't discussed yet, but that we might find out more in our next activity.	Text, images, advantages, disadvantages, communicate
Events and Actions	investigate how characters can be moved using 'events'. They will analyse and improve an existing	explain the relationship between an event and an action	You will need an awareness of basic movements in Scratch, and how to associate events with	Motion Event Sprite

	project, and then apply what they have learned to their own projects. They will then extend their learning to control multiple sprites in the same project.	choose which keys to use for actions and explain my choices identify a way to improve a program	actions. You will also need to know how to program multiple sprites.	Algorithm logic
	-	Cycle 2		
Cycle 2	Purpose	Respect	Communication	Key Vocabulary
Sharing Information	concept of a system. Learners will develop their understanding of components working together to make a whole. They will explore how digital systems might work and the physical and electronic connections that exist.	explain that systems are built using a number of parts describe that a computer system features inputs, processes, and outputs explain that computer systems communicate with other device	<ul> <li>The customer places their order on the company website and requests that the parcel is delivered to a convenient locker.</li> <li>2. The order is then picked from a warehouse and taken to the locker by a courier.</li> <li>3. Once the item is secure inside a locker, the customer receives an email to say their order is ready for collection. A barcode or code is also sent to the customer.</li> <li>4. The customer goes to the designated smart locker. They scan the barcode, or key in the code.</li> <li>5. When that code is recognised by the system, the appropriate locker unlocks and opens. The customer can take their parcel and close the locker.</li> <li>6. The locker is connected to the company's system, which means the company will know when parcels have been collected. The company will also know how many lockers are free and available for other deliveries.</li> </ul>	System Connection Digital Input Process output
Vector Drawing	Vector Drawing -Vector drawings are computer graphic images that are made using 2-D shapesThe drawings are connected by lines and curves to form polygons and other shapes, forming a complete pictureThere are lots of different apps and programs that can help us to complete vector drawings, including Google Drawings and Adobe Illustrator Many techniques, e.g. zooming, rotating,	Vector drawings use lines and shapes to create bigger and more detailed images.         Plan your drawing by thinking about what shapes it is made up of. Each shape is called an object.       The tail of the shapes overlap, so the shapes overlap, so the shapes overlap, so the shape is called an object.       When vector drawing, the shapes overlap, so the shapes overlap, so the shapes overlap, so the shape is called an object.         Copy and the base used to move the dots the shape to the same thing over and over by duplicating shapes. This is done most easily be overlap to the variable to the dots the same tail.       You can save a lot of time and effort doing the same thing over and over by duplicating shapes. This is done most easily be overlap to the variable to the dots the same tail.         Work can can enterge/reduce an object by clicking on it and dragging the handles to the desired size.       You can rotate an object by dragging the circular handle at the top.	Grouping: 1. Select all images. 2. Right-click 3. Choose 'group.' All of the objects can now be maved and changed at the same time.       Selecting Multiple Objects         Advanced Layering: Right-click on objects and use the 'send to back' and 'bring to front' tools (in 'order') to ensure that your layering is in the correct order.       This allows you to perform tasks with the whole drawing, rather than individual objects:         Backgrounds: You can create backgrounds by uploading images (using this icon). Remember to 'send to back' after it has been inserted.       When you perform an action (e.g. copy and paste) it will now apply to all.	Vector, object, handles, rotate, enlarge/reduce, layering, gradient, zoom, alignment, grouping

	resizing & duplicating, can help to create accurate images.			
Databases	Flat-File Databases -Data is raw numbers and figures. Information is what we can understand from analysing dataThere are lots of different ways that we can collect, log and interpret data, including by using databasesDatabases organise data so that it can be easily added to, amended, stored and accessed. Computer databases can allow large amounts of data to be sorted, filtered and edited more easily.	A database is a collection of organised data that is easily stored and used. Databases often structure data in logical ways (e.g. in columns, rows and tables) so that it can be accessed by those who need it easily. Databases are made up of individuals records, which contain information in different fields (categories).	Computer databases often contain large amounts of data. We can find the data that we need by using the 'search', 'filter' and 'sort' functions. Search functions allow us to type in the exact word/s that we are looking for. This can be useful if we are looking for a particular recordIf we are looking for records that share certain information we can filter out data by different fields. For example, we filer in the 'age' field for all students aged 23. The database will then present only the students aged 23We can also sort records by the data in particular fields. e.g. we may sort by the students' ages, from youngest to oldest. The youngest student will then appear at the top.	Information, data, collection, database, search, sort, filter, software, fields records
Selection	Identify how conditions are used to control the flow of actions in a program. Introduced to the command blocks for conditions in programs using the Scratch programming environment. Modify the conditions in an existing program and identify the impact this has.	use and modify programs that use conditions. Identify that the displayed command block is an example of a condition that can be used in Scratch.	Explore how conditions and selection are being used in a program. Learners need to identify how many conditions there are, and what selection there is.	Selection, condition, true, false, count controlled loop
Video Editing	You should already know that <u>video</u> means the recording, reproducing and broadcasting of visual images (often accompanied by audio). -Video is made up of a sequence of images shown in quick succession, giving the impression of movement. -Many different devices can be used to record, edit and playback video and sound. -Theme, setting, characters, colour, sound, and dialogue are all important features of video.	Plot means the main events in the video, shown in a sequence. Plot features are caused by and affect one another Most videos, even very short videos, try to give the audience a <u>message</u> . This may be obvious or hidden Dialogue is the name given for the conversations between people in video texts. <u>Themes</u> are the main ideas that run through the video, e.g. love, friendship, magic, violence.	In order to edit your video, you first need to import it from your device to the computer. You then need to import it into Movie Maker by clicking 'Add videos and photos.' The <u>trim tool</u> allows you to move excess video from the beginning or the end. By right-clicking on the video thumbnail, you can choose to ' <u>split</u> ' the video into pieces. The different pieces can be <u>moved or deleted.</u> A number of <u>special effects</u> are available, including using <u>animations and transitions</u> between shots. You can also add <u>text in captions.</u>	Video Audio Themes Message Dialogue Plot Props Zoom Angle Pan/Tilt
Selection in Quizzes	-What is Scratch? Scratch is a website/ app that lets us code our own quizzes, stories, games and animations. -Scratch helps us to learn how to use programming language, whilst also being creative and using problem-solving skills. Questions can be included by using the 'ask' command blocks.	Designing an <b>algorithm</b> (set of instructions for performing a task) will help you to program the sequence that you require. -Programmers do not put their computer programs straight to work. They <b>trial</b> them first to find any errors: - <u>Sequence errors</u> : An instruction in the sequence is wrong or in the wrong place. - <u>Keying errors</u> : Typing in the wrong code. - <u>Logical errors</u> : Mistakes in plan/thinking.	Questions can be included by using the 'ask' command blocks.	Programming Scratch Logical Commands Algorithm Condition Selection Sequence Trialling Debugging

	<ul> <li>-If specific answers are needed (e.g. yes or no), these can be typed in when using the 'answer' sensing block within the = 'Operators' block - drag it into the first white space. In the second white space, we can then type in the desired answer.</li> <li>-The 'say' command block (in looks) is used to inform the user if the response was correct.</li> </ul>	-If your algorithm does not work correctly the first time, remember to <b>debug</b> it.	<ul> <li>-If specific answers are needed (e.g. yes or no), these can be typed in when using the 'answer' sensing block within the 'Operators' block - drag it into the first white space. In the second white space, we can then type in the desired answer'.</li> <li>-The 'say' command block (in looks) is used to inform the user if the response was correct.</li> </ul>
	say correct! for 2 seconds		say correct for 2 seconds
Cycle 3	Purpose	Respect	Communication
Coding Unplugged Binary	To understand how to count in binary numbers To send and receive coded binary messages Write own code Develop understanding of sorting algorithms	Understand the importance of being able to convert between binary and decimal numbers. Be able to apply binary to code cracking to understand how a computer does it	Computers use the binary number system Information in computers is stored as a series of ones and zeros (one is on and zero is off). The numbers we use are decimal or base 10. Binary is base 2 Any number to the power of 0 is 1, so $10^\circ = 1$ $10^\circ = 1$ $10^\circ = 1$ $10^\circ = 10$ $10^2 = 10 \times 10 = 100$ $10^3 = 10 \times 10 \times 10 - 1000$ $2^\circ = 1$ $2^\circ = 2$ $2^\circ = 2 \times 2 = 4$ $2^\circ = 2 \times 2 = 8$
Audio editing	Familiarise themselves with digital devices capable of playing audio, recording sound, or doing both. Identify the devices' inputs (microphone) and outputs (headphones or speakers). Consider ownership and copyright issues related to the recording of audio.	edit their recordings, for example by changing the volume of the recording or making the recording fade in or out. Open a digital recording from a file Discuss ways in which audio recordings can be altered Edit sections of an audio recording	Identify digital devices that can play audio, record sound, or do both Identify important inputs and outputs of digital devices that can play audio, record sound, or do both Explain why I need to consider who owns audio and whether I have the right to reuse it
Branching Databases	Explore questions with yes/no answers, and how these can be used to identify and compare objects. They will create their own		Investigate questions with yes/no answers Make up a yes/no question about a collection of objects

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	Koy Vocabulary
	Ney vocabulary
n.	Binary, decimal, denary, code,
L	selection
	Audio, record, playback,
	microphone, speaker,
	headphones, input, output
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	Attribute, value, questions,
	table, objects
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	yes/no questions, before using		Create two groups of objects separated by one attribute	
	these to split a collection of		Link to science	
	objects into groups.			
Drogramming B	To be able to run a controllable device	Programming blocks - blocks are arranged	The micro bit is a tiny computer which runs	Micro bit MakeCode input
	Application of programming knowledge to	into categories. Further categories can be	programs created in the environment MakeCode	process output flashing USB
- Sensing	a new system	revealed by clicking on Advanced at the	Explain that there are several parts on a	Selection, condition, if., then
		bottom of the categories. In this unit.	micro:bit. but in this unit they will only be using	else, variable, random
		learners will use Basic , Input , Loops and	some of these parts.	Input, selection, condition,
		Variables blocks. 2. Programming area -	Identify examples of conditions in the real world	variable, sensing, accelerometer
		blocks are placed from the programming	Use a variable in an if then else statement	
		area by drag and drop. 3. Emulator - this is	to select the flow of a program	
		a simulation of a physical micro:bit. It can	I can determine the flow of a program using	
		be used to run and test code without	selection	
		having to download it to the physical	forever	
		device.		
		accelerometer and ask why these devices	if button A ▼ is pressed then	
		need to detect movement. Learners should	change count - by 1	
		identify:	show string, count *	
		In a mobile phone, an accelerometer		
		senses the orientation of the device and		
		changes the orientation of the screen as it	if button B - is pressed then	
		is moved.	change count - by -1	
		In a smart watch or a fitness tracker, an	show string count -	
		accelerometer can detect movement to		
		record steps.		
		On some games controllers,		
		accelerometers sense movements which		
	Manipulating images digitally	identify changes that we can make to an	roflact on how accuit is to digitally alter images	Imago odit arrango solost digital
Photo Editing	develop their understanding of	image	and what this might mean for the images that	crop, undo, save
	how digital images can be		they see around them	Fake real
	changed and edited and how	explore how images can be changed in real	Create composite images	
	they can then be resayed and	life		
	reused They will consider the			
	impact that editing images can	explain the effect that editing can have on		
	have, and evaluate the	an image		
	effectiveness of their choices.			
Devetility	Variables in Games - Programming is	-Variables: A variable is something that is	Variables should always have a value and an appropriate	Programming variable scratch
Repetition in	when we make and input a set of	changeable. A variable is something that is	nameAdding Callouts: Select 'Looks' from the menu on the	events, code, IFD, algorithm, motor
Games	instructions for computers to follow	throughout the running of a program. In computer	left. Add it to the variable program. Edit the text to change	modify, debugging
	Variables are changeable elements of a	programming we use variables to store information	the calloutAdding Motion: Many games require sprites to	

program. Scratch is one app in which we can explore variablesWe use algorithms which we can plan, model, trial and debug, in order to create accurate command sequences, that enable variables to be enacted in games.	that might change and can be used later in our program. E.g. in a game a variable could be the current score of the player; we would add 1 to the variable whenever the player gained a point.	<ul> <li>change position. This is achieved using the 'Motion'</li> <li>commands. Select 'Motion' from the menu on the left.</li> <li>Choose from the available motion commandsAdding</li> <li>Motion: Many games require sprites to change position. T</li> <li>is achieved using the 'Motion' commands. Select 'Motion'</li> <li>from the menu on the left. Choose from the available</li> <li>motion commands -Adding Comments: Comments are a</li> <li>good way of showing that you understand what your code</li> <li>doing. Right click on the block that you want to comment</li> <li>on, and add in your comment.</li> </ul>
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Cycle 4	Purpose	Respect	Communication
Communication – Computer Systems and Networks	Explore what is necessary for effective communication and the importance of agreed protocols. Apply this understanding to IP addresses and the rules (protocols) that computers have for communicating with one another. Use a Domain Name Server (DNS) to translate web addresses into IP addresses.	"How do you use the internet?". They could think about how they use the internet inside or outside of school. – Consider digital footprint and e-safety	<ul> <li>Recognise that data is transferred using agreed methods</li> <li>Explain that internet devices have addresses</li> <li>Describe how computers use addresses to accewebsites</li> <li>Identify and explain the main parts of a data packet</li> <li>Explain that data is transferred over networks packets</li> <li>Explain that all data transferred over the internis in packets</li> </ul>

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e is	
	Key Vocabulary
ess	Communication, protocol, data, address, Internet Protocol (IP) address, Domain Name Server (DNS) Packet, header, data payload
in	
net	

3D modelling - Tinkercad	-3D means three-dimensional, or having 3 dimensions. For example, a box is a 3D shape, whereas a square is a 2D shape 3D modelling involves using computer software to create 3D shapes, in order to produce models of real world objects3D modelling allows us to view designs from different angles and experiment with various designs3D modelling is used in many industries, e.g. in interior design, architecture and making video games.	<ul> <li>The ViewCube Allow, us to switch the view of the model e.g. from the first angle, top angle, or spin around to shok.</li> <li>-Zoom in and zoom out.</li> <li>-The workspoce, where you can work on your model. The workspoce and the the distances and dimensions a cocurately.</li> <li>-Objects can be resized (white squares).</li> <li>-When you move multiple objects into the same space, they merge.</li> </ul>	Resizing: Objects can         be manually resized by         clicking and dragging         on the handles around         them. The dimensions         are labelled.         Rotating: Selecting         these handles allows us         to rotate shapes. Drag         the object to rotate it         in different ways.	2D, 3D, 3D object 3D space View Resize Colour Lift Rotate Position Select Duplicate Workspace Faces Vertices Edges
			Lifting: Use the ViewCube to change the viewing angle of the model to the front/ side. Then, use the cone handle in order to lift the object from the workspace. <u>Combining Shapes Many</u> complex shapes are made up of a number of 3D shapes – we can position and merge them together.	Handles holes
Spreadsheets	<u>-</u> A <u>spreadsheet</u> is a computer application that allows users to organise, analyse and store data in a table. Programs such as <u>Microsoft Excel</u> and <u>Google Docs</u> help users to make spreadsheets. -A spreadsheet can be made up of <u>multiple worksheets</u> . They can be reordered and renamed. Each cell has a unique reference, made up of a number (the row) and letter (the column). - <u>Data headings</u> allow data to be stored in a meaningful way. -	Formulas: A formula can tell a computer which mathematical operation to use for a calculation: add, multiply, divide, or subtract. It also tells the computer which data to use.          + = add       - = subtract       * =         multiply       / = divide         Select your cell. Use cell references to create your formula.         E.g. In D3, you enter the formula =D1*D2. The answer will appear in D3Data is raw numbers and figures. Information is what we can understand from analysing data.	Calculations: Sometimes there are large amounts of data that require multiple or complex sums. The 'fx' or 'sigma' icons (see below, depending on the program you are using) can help you to find averages (AVERAGE) add many cells together (SUM) and many other calculations. Duplicating: Duplicating allows you to create copies of the same data, without having to type it out multiple times. The copy and paste function (Ctrl+C and then Ctrl+V) can duplicate individual cells. You can duplicate whole worksheets by clicking on the worksheet name and selecting 'move or copy' then tick 'create a copy.' Spreadsheets organise and store data in meaningful ways so that it can be easily accessed and analysed. Computer spreadsheets are particularly useful for <u>powerful</u> <u>calculations, graphs and charts</u> To <u>select a cell</u> , we click on it. To enter data, we double click on it. Data can be typed directly into a cell or into the formula bar.	Information Data Spreadsheet Format Formula Accounting Filter Software Tax Business

		-There are lots of different ways that we can collect,	-By clicking on a column or row, we can <u>sort</u> information in	
		log and interpret data, including by using	different ways (e.g. alphabetically, 0-9, etc).	
Variables	<u>Programming</u> is when we make and input a set of instructions for computers to follow. - <u>Variables</u> are changeable elements of a	Variables should always have a value and an appropriate name. -Adding Callouts: Select 'Looks' from the menu on the left. Add it to	Variables: A variable is something that is changeable. A variable can be set and changed throughout the running of a program. In computer programming we use variables to store	Programming Variable Scratch Events Code LED
	program. Scratch is one app in which we can explore variables. -We use <u>algorithms</u> which we can plan, model, trial and debug, in order to create accurate command sequences, that enable variables to be enacted in games.	the variable program. Edit the text to change the callout achieved using the 'Motion' commands. Select 'Motion' from the menu on the left. Choose from the available motion commands. <b>Adding Motion:</b> Many games require sprites to change position. This is achieved using the 'Motion' commands. Select 'Motion' from the menu on the left. Choose from the available motion commands - <b>Adding Comments:</b> Comments are a good way of	<ul> <li>program. E.g. in a game a variable could be the current score of the player; we would add 1 to the variable whenever the player gained a point.</li> <li>Select 'Variables' (dark orange circle) from the menu on the left. Either choose from the available variables or 'Make A Variable.'</li> <li>Select 'Events' (light orange circle) from the menu on the left.</li> <li>Choose what needs to happen for the variable to change.</li> <li>E.g. 'When this sprite clicked' or 'when space key pressed.'</li> <li>Select 'Variables' again from the menu on the left. Choose what will happen when the event happens, e.g. 'change</li> </ul>	Algorithm Motor Modify Debugging
		showing that you understand what your code is doing. Right click on the block that you want to comment on, and add in your comment.	score by 1' (to add a point) or 'change score by -1' to remove a point.	
Web Pages	<ul> <li>-A webpage is a hypertext document that is a part of the World Wide Web.</li> <li>-Websites are a collection of webpages about the same topic. They can be found using browsers.</li> <li>-Examples of websites are Amazon and YouTube. Webpages are the different pages on the websites.</li> <li>-Websites are created for a chosen purpose, and with a particular <u>audience</u> in mind.</li> <li>-They include <u>navigation paths</u>, and must adhere to <u>copyright</u> and <u>fair use of media</u> rules</li> </ul>	Purpose:       The purpose is the reason for your web page – what is it for? You should make sure that your web page meets its purpose.         Audience:       The audience are the people who your web page is aimed at. You should make decisions with your target audience in mind.         Copyright:       You should only use images that are copyright-free. Many images are owned by people/ companies and cannot just be reused.	<ul> <li>Navigation Pathways are also known as breadcrumb trails.</li> <li>Hyperlinks allow different pages to be linked together.</li> <li>These links help the audience to navigate the website easily.</li> <li>The user can also keep track of where they have been on the website.</li> <li>Websites can be found using browsers. Browsers allow us to find our way around the worldwide web, and show us what websites look like.</li> <li>The website name is usually visible in large font, particularly on the home page.</li> <li>There is often a ogan/ logo and short description of what he website is about.</li> <li>Website is about.</li> <li>Website is adout.</li> <li>Webpages are made up of a code called Hypertext Markup Language (HTML). You can find this by right-tiking on the website.</li> <li>Web (in blue).</li> </ul>	Web page Website Domain Hypertext Purpose/Audience Browser Copyright Homepage Navigation Pathways
Animations	Discuss whether they think that a picture can move. Learn about simple animation techniques and create their own animations in the style of flipbooks (flick books) using sticky notes.	Draw a sequence of pictures Create an effective flipbook–style animation Explain how an animation/flip book work	Understand that an animation is made up of a sequence of still images and can be created using many different mediums Physically moving pictures: talk about physically picking up a picture, e.g. a framed print and moving it across the room. Animation: have experience of animation already, and may know that techniques can be used to make still pictures look like they are moving.	Animation, flip book Augmented reality

Augmented reality (AR): have experience of AR, e.g. from	
books at home where they scan a page of their book with a	
device and the pictures 'come to life' through the medium of	1
technology.	