End Points for Computing across EYFS and Key Stage 1.

		EYFS	Year 1	Year 2
		Although computing is not a strand within EYFS, children experience IT through continuous provision and Computing lesson from the Spring Term	Technology All Around Us, Digital Painting, Moving a Robot, Grouping data,	IT all around us, Digital Photography, Making Music, Pictograms, Robot Algorithms, Introduction to quizzes.
Computing Systems, Networks and Online Safety—CS (Computer Science, Networks, Safety and Security.		• To name a type of technology in the classroom (iPad) • To name a type of technology in our school (Photocopier) • To locate a mouse, keyboard and monitor on a desktop computer.	• To name 3 types of technology(computer, iPad, traffic lights, heating system) • To locate the on switch of a desktop PC. • To know that the shift key creates a capital letter.	• To know that if something online is upsetting, it needs to be reported to an adult. • To name examples of how IT helps to improve our word. e.g. traffic lights and how they keep us safe on the road.
Creating Media, Design and Development, Effective Use of Tools, Impact of Technology.		• To use a device to interact with age appropriate apps e.g . using Draw and Tell app. • To know how to use a mouse to make lines and squiggles. • To use a QR code to engage with a website. • To know that they can use technology to find information online.	• To know the icons for the shape and line tools to draw a picture. • To explain how to change the colour and size of the paintbrush. • To know that the space keys make a space and backspace deletes text. • To know where the font and size icons are and that they change font size and make the text bigger or smaller.	• To be able to add text and an image. • To be able to save and retrieve work. • To be able to use a scroll bar on webpages. • To explain how we can present information using a computer. • To show how music is made from a series of notes.
Data and Information		• To know how to read a simple block graph.	To name a group of objects using a label according to property (including size, shape or colour.)	• To understand, use and read a tally chart. • To use a program to create a pictogram.
Programming		• To follow a set of instructions to move forwards, backwards and to make turns. (Unplugged) • To know how to make a beebot to move 1 and then 2 steps forwards / backwards s • To be able to make an icon move forward 5 steps and back 5 steps. (Daisy the Dinosaur) • To know that an algorithm is a list of steps.	• To know the 4 commands for the Beebot and use in a asequence including forwards/ backwards. • To explain what a start block does in a program. • To name directional blocks which move a sprite. .	• To write a program for the Beebot using the 4 commands in a sequence including forwards/ backwards/ left turn/ right turn. • To know when and how to debug progams • To know a series of instructions (usually on a computer) is called an algorithm. • To be able to move the sprite and manipulate the controls by setting conditions. E.g. Jump high. • To change the background on Scratch. • To create 2 sprites and make a conversation happen between them. • To know how to save and retrieve projects. • To say one way a project could be improved.
Internet Safety		• To recognise kind and unkind behaviour.	• To be able to identify the positives and negatives when using technology. • To understand how your online activity can affect others.	• To know the risks of sharing information without permission • To understand the type of information you should/should not share online.

End Points for Computing across Key Stage 2

	Year 3	Year 4	Year 5	Year 6
	Connecting Computers, Stop-Frame Animation, Desktop Publishing, Branching Databases., Programming: Sequence in Music, , Events and actions game	The Internet, Audio Editing, Data Logging, photo editing Programming– repetition in shapes, repetition in games,	Sharing information, Video Editing, , Flat file databases, Vector drawing, Programming-: Selection in physical computing Selection in quizzes,	Communication, Web page creation, Introduction to spreadsheets, 3D modelling Programming: Variables in games, physical computing: microbits
Computing Systems, Networks and Online Safety. (Computer Science, Networks, Safety and Security.)	• To identify at least 2 networked devices around them, (Network switch, server, Wireless Access Point WAP) • To be able to explain that different devices have different purposes. (Smartboard for teaching, iPad for researching) •	• To know that websites and their content are created by people. • To know that information found online is not necessarily honest, accurate or legal. • To know what a URL address is and how to access a website.	• Can describe that a computer system uses an input, process and an output. • Can explain that different media, files and information can be shared on the internet either privately or publicly. • Can explain how the internet enables effective collaboration.	• Can explain that search results are ordered. • Can name a variety of ways of communicating over the internet, (email, social media post, comment field, blog, vlog etc.)
Creating Media, Design and Development, Effective Use of Tools, Impact of Technology.	• To be able to explain that an animation is a sequence of pictures or images. • To be able to name a program used to make stop, frame animation, (e.g. iMotion) • To explain the difference between text and images. • To be able to demonstrate how to change font size and colour on a desktop computer, (through Word and Publisher)	• Can identify the uses for recorded audio (music , podcasts etc.) • To explain the ways that audio can be recorded and how to make it of high quality. • To be able to explain the uses for gathered data. • To be able to explain the different ways data might be gathered.	• Can recognise videos are moving images which may include sound. • Can name digital devices that can record video. • Can identify what makes an effective / appealing video. • To know that vector drawing has different layers / shapes. • Know drawing tools can be used to produce different outcomes.	• Can define what is meant by the terms, 'copyright' and 'fair use'. • Can describe how pages of a website are linked together (through the use of hyperlinks). • Can name 3D shapes needed to create a model of a real world objects. • Can explain why we might represent 3D objects on a computer.
Data and Information	• To give an example of an open-ended question and a yes/ no question. • To know that the objects in a branching database need to be split into similar sized groups.	• To be able to explain the reasons why somebody may want to change the composition of an image. • To be able to give examples of positive and negative effects that editing an image may have.	• Can explain that programs can be used to compare data. • Can explain how information can be grouped. • Can explain what a 'field' and 'record' in a database.	• Can explain that objects can be described using data. • Knows that a formula must start with an = sign. • Knows that data an be best represented in tables or graphs.
Programming	• To explain what a sprite is. • To be able to identify sprites and backgrounds in the Scratch program. • To know that event blocks are yellow and movement blocks are darker blue on Scratch.	• To be able to identify patterns of repetition in real life. (brushing teeth, dance) • To explain how to use the repeat blocks in Scratch. • To be able to explain the uses of repetition in programming and link this with the drawing of various shapes.	• To know that a loop can be stopped when a condition is met. • Can explain a loop can be used to repeatedly check when a condition has been met (or not). • Can explain how selection is used in computer programs. • Can explain how selection effects the flow of a program.	• Can define a 'variable' as something changeable. • Can explain why a variable is used in a program. • Can explain that some devices need to have sensors in order to help it make decisions about how many jumps have been made. • Can explain that what a device senses can change the flow of a program.
Internet Safety	• To understand the difference between safe and risky choices online. • To know why passwords are important.	• To recognise the key values that are important in positive online relationships. • To identify how and who to ask for help.	• To recognise possible influences and pressures that may present themselves online • To know when to act upon negative online behaviours.	• To understand the relationship between online and offline behaviours and their impact on myself and others. • To understand and be able to name healthy strategies when using technology and going online