Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
E-safety & E- sense – THIS WILL BE TAUGHT WHENEVER CHILDREN HAVE ACCESS TO THE INTERNET.	*Pupils talk about ways to keep safe. (PD - Health and Self-Care)*	*Pupils should be taught to use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or their online technologies.*		*Pupils should be taught to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour, identify a range of ways to report concerns about content and contact. Be discerning in evaluating digital content.*			
	• I can talk about what might worry me if I go online. • I know that if I am worried about something online, I should tell a trusted grown-up.	• I know that some information is personal and that I should not share it. • I know that if I am worried about something online, I should tell a trusted grown-up. • I know that I should not say unkind things to people online. • I know that not everyone online is nice. • I know that I should not talk to strangers online.	• I can give examples of personal information that should not be shared. • I understand that I can share personal information accidentally, and not just through what I say. • I can give examples of things that I should tell a trusted grown-up about. • I understand that my words can be misunderstood online. • I know that sometimes people pretend to be different people online. • I know that if I do not know someone in real life, they are a stranger.	• I understand that clicking links or pages I do not know can cause problems. • I know that people can misunderstand my jokes online and that it is best not to comment on things unless I am being kind. • I know that not everything I see online is true. • I can give examples of acceptable and unacceptable behaviour. • I can give examples of when I would tell a trusted adult about something that has concerned me. • I understand that friends and family of friends are still strangers if I do not know them in real life.	• I understand that I can become an online bully, even if I do not mean to. • I understand that if I share something online, I no longer control it and it can be used in ways I never intended. • I know that I do not always need to share a comment or opinion. • I know that if I share content, which I have not fact checked myself, I may be helping to spread lies. • I understand that by telling a trusted about my concerns, I may be helping other people too, not just me.	• I know what "grooming" means and some of the ways people can trick me. • I know what "fake news means" and some of the ways I can check information for myself. • I know what click bait is and some of the reasons that people use click bait. • Why do social media apps have a minimum age limit of 13 years old? • I understand the reasons for PEGI games ratings and the effect that some games and websites can have on young minds.	• I understand what social media is and that it is not actually free. • I understand that many online apps are made to be addictive and to encourage me to share all time and spend as much time online as possible. • I understand that many social media platforms are used to spread misinformation and that I should check facts myself, before sharing. • I understand that my behaviour and that of my friends can cause harm to others, if I am not careful. • I can explain why it is important to be a critical, independent thinker, in order to have a more positive experience online.
E-safety & E- sense Key Vocabulary	**Online** **Choices** **Website**	**Information** **Personal** **Online** **Strangers** **Rules**	**'Personal Information'** **Acceptable** **Unacceptable**	**Link** **Pages** **Comment**	**Online/Cyber bullying** **Content**	**Grooming** **Fake news** **Click Bait** **PEGI games rating**	**Social Media** **Online apps** **Addictive** **Platforms** **Misinformation** **Critical thinker**

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Pupils should select and use technology for particular purposes. (UW – Technology) *Pupils can follow instructions involving several ideas or actions. (CL – Understanding)*	*Pupils should be taught to understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.*		*Pupils should be taught to 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 accomplish given goals.*			
Programming	• I can follow step-by-step instructions. • I can give step-by-step instructions to achieve a goal. • I can program a toy (bee-bot) to follow a set of instructions to achieve a goal.	• I understand that an algorithm is a set of good instructions. • I know that computers need instructions to do jobs. • I can use simple directional commands (up, down, left & right) to move a real-life object or a virtual object on a screen. • I can solve simple, directional challenges, and find and fix mistakes.	• I can solve problems by breaking them down into small steps – predicting what move I should make next. • I can use a challenge-based environment to code simple programs to solve problems, using more than just directional commands. • I can use forward and turn commands to control an onscreen object. • I can debug simple programs. • I can recognise simple patterns and use loops to repeat a number of single commands.	• I can explore and learn how to use a visual programming language at a simple level, by adding and changing screen objects. • I can follow an algorithm challenge step-by-step, in order to create a simple simulation program. • I can use simple repeat loops to perform more than one command multiple times. • I can use different input events (such as keystrokes and mouse clicks) and output as images and sounds. • I can debug my program by searching for and correcting simple mistakes.	• I can create a stop motion animation program by creating and changing images and sequencing coded instructions to run images one after another. • I can watch a simple program and then start to explain an algorithm which could have been used to make it. • Repetition is used for a fixed number of events or to carry on forever. • I can start to suggest reasons why a simple program is not working and suggest fixes for the problems. • I can use simple conditional code to solve problems in a coding challenge app. • I can use embedded repeat loops in a coding challenge app.	• I can use coding to accomplish goals using different coding systems. • I can plan an algorithm and then implement it in code. • I can use conditional commands to allow programs to react based on different inputted data. • I can use conditional repetition to repeat a sequence of code until specified data is received. • I can suggest code which could be used to create a program from a given algorithm. • I can begin to use simple variables to create a score in a game.	• I can plan a story making program – choosing variables which will be used. • I can follow an algorithm to make a story program which allows users to input variables as words. • I can sequence my code correctly and debug it when it goes wrong. • I can add sounds and images to animate a program. • I can use other software to find images for a program and then upload those images into the program as objects. • I can explain why I have sequenced my code the way I have and suggest sequences of code to accomplish given goals.
Programming Key Vocabulary	**Instructions** **Buttons** **Movement**	**Algorithm** **Instructions** **Directional** **Real-life** **Virtual**	**Code** **Debug** **Loop** **Command**	**'Visual Programming Language'** **Simulation** **Program** **Repeat Loops** **Input Events** **Keystrokes** **Output**	**Stop motion animation** **Sequencing** **'Conditional Code'** **'Embedded repeat loops'**	**Coding systems** **'Conditional Commands'** **'Conditional repetition** **Variables'**	**Upload**

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Pupils should select and use technology for particular purposes. (UW – Technology)	*Pupils should be taught to use technology purposefully to organise and manipulate digital content.*		*Pupils should be taught to 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.*			
Handling Data	• I can turn on a device. • I can use hardware, such as a mouse and a keyboard.	• I can find and open files and folders. • I can save a picture using an online platform.	• I can save a file to a specific location on a computer. • I can locate a saved file, open it, and add to its content.	• I can create, save, open and modify a document using a word processing software. • I can suggest different software for different purposes.	• I can help to design and create an online survey to collect data. • I can use a mobile device to capture and record photos and videos for a project.	• I can download content from the WWW and use it in combination with other programs to present information. • I can collect, analyse and present information in a working database.	• I can download content from the WWW and provide hyperlinks to WWW content in combination with other programs to present information.
Handling Data Key Vocabulary	**Screen Mouse Computer Device Keyboard**	**Open Files Folders Save Digital Image Space Bar**	**Open Files Documents Folders Save Retrieve Enter/return Caps Lock**	**Word Processing Software**	**Online Survey Capture data**	**Database**	**Download Hyperlinks**

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multimedia	*Pupils should select and use technology for particular purposes. (UW – Technology)*	*Pupils should be taught to use technology purposefully to create digital content.*		*Pupils should be taught to 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.*			
	• I can take a photo or a video using a device (tablet). • I can find and replay the media.	• I can create art and simple percussion rhythms, using online tools.	• I can create art and music, using a range of instruments and sounds.	• I can create a musical program which is able to play a given tune. • I can create art work using a range of styles online.	• I can create stop-motion animation, by creating, manipulating and programming images. • I can create a word document by inserting images from the WWW and information from other documents. • I can change the format of a document and upload and share it through The Cloud.	• I can create artwork by inserting and manipulating shapes in Microsoft Word. • I can use the WWW to research an prepare data for a quiz. • I can create a quiz program, using a flowchart plan of collected data. • I can collect, analyse and present information in a working database.	• I can create interactive quizzes using Microsoft PowerPoint. • I can use hyperlinks and I can locate, download and insert content to present my information in a more engaging way.
Multimedia Key Vocabulary	**Image** **Video**	**Paint** **Sounds**	**Paint effects**	**Multimedia** **Presentations** **Alignment** **Brush size**	**Format** **The Cloud** **Online Sharing** **Copy** **Paste** **'Keyboard shortcuts'**	**Manipulating** **Modification** **Flowchart** **Analysis**	**Audience** **Copyright** **Hyperlinks**

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Technology in our lives	*Pupils should recognise that a range of technology is used in places such as homes and schools. (UW – Technology)*	*Pupils should be taught to use technology purposefully to store and retrieve digital content and to recognise common uses of information technology beyond school.*		*Pupils should be taught to 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.*			
	• I can give examples of where computers are found in my everyday life (at home and at school).	• I can find and open files and folders. • I can save a picture using an online platform. • I can give examples of where computers are found in everyday life and some of the jobs that computers do for us. • I can recognise that computers come in all shapes and sizes and don't need a keyboard, mouse and screen to be a computer.	• I can give a simple definition of what a computer is (a machine which follows instructions to do different jobs for us – computers are the only machines which can do this). • I understand that computers are given their instructions in a language that they can understand: code. • I can save a retrieve a file using an online service.	• I understand what a computer network is on a simple level and I know some of the names of the components needed for a computer network and the jobs that they do. • I understand that the WWW and internet are not the same thing and that the Internet is a network of networks. • I have a basic idea of how search engines rank results when I look for information.	• I understand what the term "Cloud Computing" means. • I know that services I access through the internet depend on data centres around the world. • I know that cloud computing allows for greater collaboration and data sharing. • I can trace websites to find out where in the world their data is stored. • I am beginning to have an appreciation that technology and innovation are changing the way we live our lives.	• I have a deeper understanding of what computers are (machines which into which data can be input, stored, processed and output). • I understand what the term "fake news" means and I can suggest ways to verify information. I understand the importance of not sharing news or information until I have tried to verify it myself first. • I understand what a database is. • I can plan and build a working, searchable database.	• I can suggest some of the ways in which technology has changed the way we live dramatically over the past two decades. • I know what AI and machine learning mean and I understand some of the ways in which they are changing our world. • I understand what the term social media means, and I am developing an understanding on how it affects its users and that social media users pay for the services with their personal information. • I know that it is important to become a "critical, independent thinker" when evaluating content on the WWW, in order to have a better experience of what it has to offer.
Technology in our lives Key Vocabulary	**Internet** **Computer** **Device**	**Purpose** **Hardware** **Software**	**Programming** **Language** **Code** **Online tools**	**Network** **Component** **World Wide Web** **Internet** **Search Engine** **Website/web page**	**Cloud computing** **Data**	**Input** **Storage** **Processing** **Output** **Fake News** **Database** **Responsibility**	**AI** **'Machine learning'** **Social Media**